

020904

10281 U.S. PTO

**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	111325-127
First Inventor	Mark J. STEFIK et al.
Title	SYSTEM FOR CONTROLLING THE DISTRIBUTION AND USE OF DIGITAL WORKS UTILIZING DIGITAL TICKETS
Express Mail Label No.	

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

ADDRESS TO:

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 132]
(preferred arrangement set forth below)
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 13]
5. Oath or Declaration [Total Pages 2]
 - a. ☐ Newly executed (original or copy)
 - b. ☒ Copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 18 completed)
 - i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b)
6. ☒ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
 - a. ☐ Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. ☐ CD-ROM or CD-R (2 copies; or
 - ii. ☐ paper
 - c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document
(if foreign priority is claimed)
16. ☐ Nonpublication request under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☐ Other: _____

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

- ☒ Continuation of prior Application No: 09/777,966 filed February 7, 2001, which is a Divisional of Application No. 08/967,084 filed November 10, 1997, now U.S. Patent 6,236,971; which is a Continuation of Application 08/344,760 filed November 23, 1994, abandoned.

Prior application information:

Examiner: Firmin Backer

Group / Art Unit: 3621

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

☒ Customer Number or Bar Code Label 22204 or ☐ Correspondence address below
(Insert Customer No. or Attach bar code label here)

Name					
Address					
City	State	Zip Code			
Country	Telephone	Fax			
Name (Print/Type)	Marc S. Kaufman	Registration No. (Attorney/Agent)		35,212	
Signature			Date	February 9, 2004	

13281 U.S. PTO

**FEE TRANSMITTAL
FOR FY 2003**

Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** \$1,456.00

Complete if Known

Application Number	New Application
Filing Date	February 9, 2004
First Named Inventor	Mark J. STEFIK et al.
Examiner Name	Firmin Backer
Art Unit	3621
Attorney Docket No.	111325-127

METHOD OF PAYMENT (check all that apply)
☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None
☒ Deposit Account:Deposit
Account
Number

19-2380 (111325-127)

Deposit
Account
Name

Nixon Peabody LLP

The Commissioner is authorized to: (check all that apply)☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Fee Code	Fee (\$)	Small Entity Fee Code	Fee (\$)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	\$770
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) \$770.00**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Total Claims	Extra Claims	Fee from below	Fee Paid
39	-20** = 19	X \$18	= \$342.00
Independent Claims	7	-3** = 4	X \$86 = \$344.00
Multiple Dependent		X \$290	=

Large Entity Fee Code	Fee (\$)	Small Entity Fee Code	Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) \$686.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity Fee Code	Fee (\$)	Small Entity Fee Code	Fee (\$)	Fee Description
1051	130	2051	65	Surcharge - late filing fee or oath
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet
1053	130	1053	130	Non-English specification
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action
1251	110	2251	55	Extension for reply within first month
1252	420	2252	210	Extension for reply within second month
1253	950	2253	475	Extension for reply within third month
1254	1,480	2254	740	Extension for reply within fourth month
1255	2,010	2255	1,005	Extension for reply within fifth month
1401	330	2401	165	Notice of Appeal
1402	330	2402	165	Filing a brief in support of an appeal
1403	290	2403	145	Request for oral hearing
1451	1,510	1451	1,510	Petition to institute a public use proceeding
1452	110	2452	55	Petition to revive - unavoidable
1453	1,330	2453	665	Petition to revive - unintentional
1501	1,330	2501	665	Utility issue fee (or reissue)
1502	480	2502	240	Design issue fee
1503	640	2503	320	Plant issue fee
1460	130	1460	130	Petitions to the Commissioner
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)
1806	180	1806	180	Submission of Information Disclosure Stmt
8021	40	8021	40	Recording each patent assignment per property (times number of properties)
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))
1801	770	2801	385	Request for Continued Examination (RCE)
1802	900	1802	900	Request for expedited examination of a design application

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) \$**SUBMITTED BY**

Name (Print/Type)

Marc S. Kaufman

Registration No.
(Attorney/Agent)

35,212

Complete (if applicable)

Telephone

(202) 585-8000

Signature

Date

February 9, 2004

020904

10281 U.S. PTO

PTO/SB/05 (03-01)
Approved for use through 10/31/2002. OMB 0651-0032**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	111325-127
First Inventor	Mark J. STEFIK et al.
Title	SYSTEM FOR CONTROLLING THE DISTRIBUTION AND USE OF DIGITAL WORKS UTILIZING DIGITAL TICKETS
Express Mail Label No.	

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 132]
(preferred arrangement set forth below)
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 13]
5. Oath or Declaration [Total Pages 2]
 - a. ☐ Newly executed (original or copy)
 - b. ☒ Copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 18 completed)
 - i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s)
named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b)
6. ☒ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
 - a. ☐ Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. ☐ CD-ROM or CD-R (2 copies; or
 - ii. ☐ paper
 - c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document
(if foreign priority is claimed)
16. ☐ Nonpublication request under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☐ Other: _____

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☒ Continuation of prior Application No: 09/777,966 filed February 7, 2001, which is a Divisional of Application No. 08/967,084 filed November 10, 1997, now U.S. Patent 6,236,971; which is a Continuation of Application 08/344,760 filed November 23, 1994, abandoned.

Prior application information:

Examiner: Firmin Backer

Group / Art Unit: 3621

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.**19. CORRESPONDENCE ADDRESS**

<input checked="" type="checkbox"/> Customer Number or Bar Code Label	22204	or <input type="checkbox"/> Correspondence address below
(Insert Customer No. or Attach bar code label here)		

Name					
Address					
City	State	Zip Code			
Country	Telephone	Fax			
Name (Print/Type)	Marc S. Kaufman	Registration No. (Attorney/Agent)		35,212	
Signature	Date		February 9, 2004		

13281 U.S. PTO

**FEE TRANSMITTAL
FOR FY 2003**

Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** \$1,456.00

Complete if Known

Application Number	New Application
Filing Date	February 9, 2004
First Named Inventor	Mark J. STEFIK et al.
Examiner Name	Firmin Backer
Art Unit	3621
Attorney Docket No.	111325-127

METHOD OF PAYMENT (check all that apply)
☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None
☒ Deposit Account:Deposit
Account
Number

19-2380 (111325-127)

Deposit
Account
Name

Nixon Peabody LLP

The Commissioner is authorized to: (check all that apply)☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Fee Code	Fee (\$)	Small Entity Fee Code	Fee (\$)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	\$770
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) \$770.00**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Total Claims	Extra Claims	Fee from below	Fee Paid
39	-20** = 19	X \$18	= \$342.00
Independent Claims	7	-3** = 4	X \$86 = \$344.00
Multiple Dependent		X \$290	=

Large Entity Fee Code	Fee (\$)	Small Entity Fee Code	Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) \$686.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity Fee Code	Fee (\$)	Small Entity Fee Code	Fee (\$)	Fee Description
1051	130	2051	65	Surcharge - late filing fee or oath
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet
1053	130	1053	130	Non-English specification
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action
1251	110	2251	55	Extension for reply within first month
1252	420	2252	210	Extension for reply within second month
1253	950	2253	475	Extension for reply within third month
1254	1,480	2254	740	Extension for reply within fourth month
1255	2,010	2255	1,005	Extension for reply within fifth month
1401	330	2401	165	Notice of Appeal
1402	330	2402	165	Filing a brief in support of an appeal
1403	290	2403	145	Request for oral hearing
1451	1,510	1451	1,510	Petition to institute a public use proceeding
1452	110	2452	55	Petition to revive - unavoidable
1453	1,330	2453	665	Petition to revive - unintentional
1501	1,330	2501	665	Utility issue fee (or reissue)
1502	480	2502	240	Design issue fee
1503	640	2503	320	Plant issue fee
1460	130	1460	130	Petitions to the Commissioner
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)
1806	180	1806	180	Submission of Information Disclosure Stmt
8021	40	8021	40	Recording each patent assignment per property (times number of properties)
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))
1801	770	2801	385	Request for Continued Examination (RCE)
1802	900	1802	900	Request for expedited examination of a design application

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) \$**SUBMITTED BY**

Name (Print/Type)

Marc S. Kaufman

Registration No.
(Attorney/Agent)

35,212

Complete (if applicable)

Telephone

(202) 585-8000

Signature

Date

February 9, 2004

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

SYSTEM FOR CONTROLLING THE DISTRIBUTION AND USE OF DIGITAL WORKS USING DIGITAL TICKETS

Field of the Invention

The present invention relates to the field of distribution and usage rights enforcement for digitally encoded works.

Background of the Invention

A fundamental issue facing the publishing and information industries as they consider electronic publishing is how to prevent the unauthorized and unaccounted distribution or usage of electronically published materials. Electronically published materials are typically distributed in a digital form and recreated on a computer based system having the capability to recreate the materials. Audio and video recordings, software, books and multimedia works are all being electronically published. Companies in these industries receive royalties for each accounted for delivery of the materials, e.g. the sale of an audio CD at a retail outlet. Any unaccounted distribution of a work results in an unpaid royalty (e.g. copying the audio recording CD to another digital medium.)

The ease in which electronically published works can be "perfectly" reproduced and distributed is a major concern. The transmission of digital works over networks is commonplace. One such widely used network is the Internet. The Internet is a widespread network facility by which computer users in many universities, corporations and government entities

communicate and trade ideas and information. Computer bulletin boards found on the Internet and commercial networks such as CompuServ and Prodigy allow for the posting and retrieving of digital information. Information services such as Dialog and LEXIS/NEXIS provide databases of current information on a wide variety of topics. Another factor which will exacerbate the situation is the development and expansion of the National Information Infrastructure (the NII). It is anticipated that, as the NII grows, the transmission of digital works over networks will increase many times over. It would be desirable to utilize the NII for distribution of digital works without the fear of widespread unauthorized copying.

The most straightforward way to curb unaccounted distribution is to prevent unauthorized copying and transmission. For existing materials that are distributed in digital form, various safeguards are used. In the case of software, copy protection schemes which limit the number of copies that can be made or which corrupt the output when copying is detected have been employed. Another scheme causes software to become disabled after a predetermined period of time has lapsed. A technique used for workstation based software is to require that a special hardware device must be present on the workstation in order for the software to run, e.g., see U.S. Patent No. 4,932,054 entitled "Method and Apparatus for Protecting Computer Software Utilizing Coded Filter Network in Conjunction with an Active Coded Hardware Device." Such devices are provided with the software and are commonly referred to as dongles.

Yet another scheme is to distribute software, but which requires a "key" to enable it's use. This is employed in distribution schemes where "demos" of the software are provided on a medium along with the entire product. The demos can be freely used, but in order to use the actual product, the key must be purchased. These scheme do not hinder copying of the software once the key is initially purchased.

A system for ensuring that licenses are in place for using licensed products is described in PCT Publication WO 93/01550 to Griswold entitled "License Management System and Method." The licensed product may be any electronically published work but is most effective for use with works that are used for extended periods of time such as software programs. Griswold requires that the licensed product contain software to invoke a license check monitor at predetermined time intervals. The license check monitor generates request datagrams which identify the licensee. The request datagrams are sent to a license control system over an appropriate communication facility. The license control system then checks the datagram to determine if the datagram is from a valid licensee. The license control system then sends a reply datagram to the license check monitor indicating denial or approval of usage. The license control system will deny usage in the event that request datagrams go unanswered after a predetermined period of time (which may indicate an unauthorized attempt to use the licensed product). In this system, usage is managed at a central location by the response datagrams. So for example if license fees have not been paid, access to the licensed product is terminated.

It is argued by Griswold that the described system is advantageous because it can be implemented entirely in software. However, the system described by Griswold has limitations. An important limitation is that during the use of the licensed product, the user must always be coupled to an appropriate communication facility in order to send and receive datagrams. This creates a dependency on the communication facility. So if the communication facility is not available, the licensed product cannot be used. Moreover, some party must absorb the cost of communicating with the license server.

A system for controlling the distribution of digitally encoded books is embodied in a system available from VPR Systems, LTD. of St. Louis, Missouri. The VPR system is self-contained and is comprised of: (1) point of sale kiosks for storing and downloading of books, (2) personal storage mediums (cartridges) to which the books are downloaded, and (3) readers for viewing the book. In a purchase transaction, a purchaser will purchase a voucher card representing the desired book. The voucher will contain sufficient information to identify the book purchased and perhaps some demographic information relating to the sales transaction. To download the book, the voucher and the cartridge are inserted into the kiosk.

The VPR system may also be used as a library. In such an embodiment, the kiosk manages the number of "copies" that may be checked out at one time. Further, the copy of the book is erased from the users cartridge after a certain check-out time has expired. However, individuals cannot loan books because the cartridges may only be used with the owners reader.

The foregoing distribution and protection schemes operate in part by preventing subsequent distribution of the work. While this certainly prevents unauthorized distributions, it does so by sacrificing the potential for subsequent revenue bearing uses. For example, it may be desirable to allow the lending of a purchased work to permit exposure of the work to potential buyers. Another example would be to permit the creation of a derivative work for a fee. Yet another example would be to permit copying the work for a fee (essentially purchasing it). Thus, it would be desirable to provide flexibility in how the owner of a digital work may allow it to be distributed.

While flexibility in distribution is a concern, the owners of a work want to make sure they are paid for such distributions. In U.S. Patent No. 4,977, 594 to Shear, entitled "Database Usage Metering and Protection System and Method," a system for metering and billing for usage of information distributed on a CD-ROM is described. The system requires the addition of a billing module to the computer system. The billing module may operate in a number of different ways. First, it may periodically communicate billing data to a central billing facility, whereupon the user may be billed. Second, billing may occur by disconnecting the billing module and the user sending it to a central billing facility where the data is read and a user bill generated.

U.S. Patent No. 5, 247, 575, Sprague et al., entitled "Information Distribution System", describes an information distribution system which provides and charges only for user selected information. A plurality of

encrypted information packages (IPs) are provided at the user site, via high and/or low density storage media and/or by broadcast transmission. Some of the IPs may be of no interest to the user. The IPs of interest are selected by the user and are decrypted and stored locally. The IPs may be printed, displayed or even copied to other storage medias. The charges for the selected IP's are accumulated within a user apparatus and periodically reported by telephone to a central accounting facility. The central accounting facility also issues keys to decrypt the IPs. The keys are changed periodically. If the central accounting facility has not issued a new key for a particular user station, the station is unable to retrieve information from the system when the key is changed.

A system available from Wave Systems Corp. of Princeton, New York, provides for metering of software usage on a personal computer. The system is installed onto a computer and collects information on what software is in use, encrypts it and then transmits the information to a transaction center. From the transaction center, a bill is generated and sent to the user. The transaction center also maintains customer accounts so that licensing fees may be forwarded directly to the software providers. Software operating under this system must be modified so that usage can be accounted.

Known techniques for billing do not provide for billing of copies made of the work. For example, if data is copied from the CD-ROM described in Shear, any subsequent use of the copy of the information cannot be metered or billed. In other words, the means for billing runs with the media rather

than the underlying work. It would be desirable to have a distribution system where the means for billing is always transported with the work.

Summary of the Invention

A system for controlling the distribution and use of digital works using digital tickets is disclosed. A ticket is an indicator that the ticket holder has already paid for or is otherwise entitled to some specified right, product or service. In the present invention, a "digital ticket" is used to enable the ticket holder to exercise usage rights specifying the requirement of the digital ticket. Usage rights are used to define how a digital work may be used or distributed. Specific instances of usage rights are used to indicate a particular manner of use or distribution. A usage right may specify a digital ticket which must be present before the right may be exercised. For example, a digital ticket may be specified in a Copy right of a digital work, so that exercise of the Copy right requires the party that desires a copy of the digital work be in possession of the necessary digital ticket. After a copy of the digital work is successfully sent to the requesting party, the digital ticket is "punched" to indicate that a copy of the digital work has been made. When the ticket is "punched" a predetermined number of times, it may no longer be used.

Digital works are stored in repositories. Repositories enforce the usage rights for digital works. Each repository has a "generic ticket agent" which punches tickets. In some instances only the generic ticket agent is necessary. In other instances, punching by a "special ticket agent" residing on another repository may be desired. Punching by a "special ticket agent" enables greater security and control of the digital work. For example, it can help prevent digital ticket forgery. Special ticket agents are also useful in situations where an external database needs to be updated or checked.

A digital ticket is merely an instance of a digital work. Thus, a digital ticket may be distributed among repositories in the same fashion as other digital works.

A digital ticket may be used in many commercial scenarios such as in the purchase of software and prepaid upgrades. A digital ticket may also be used to limit the number of times that a right may be exercised. For example, a user may purchase a copy of a digital work, along with the right to make up to 5 Copies. In this case, the Copy right would have associated therewith a digital ticket that can be punched up to 5 times. Other such commercial scenarios will become apparent from the detailed description.

Brief Description of the Drawings

Figure 1 is a flowchart illustrating a simple instantiation of the operation of the currently preferred embodiment of the present invention.

Figure 2 is a block diagram illustrating the various repository types and the repository transaction flow between them in the currently preferred embodiment of the present invention.

Figure 3 is a block diagram of a repository coupled with a credit server in the currently preferred embodiment of the present invention.

Figures 4a and 4b are examples of rendering systems as may be utilized in the currently preferred embodiment of the present invention.

Figure 5 illustrates a contents file layout for a digital work as may be utilized in the currently preferred embodiment of the present invention.

Figure 6 illustrates a contents file layout for an individual digital work of the digital work of Figure 5 as may be utilized in the currently preferred embodiment of the present invention.

Figure 7 illustrates the components of a description block of the currently preferred embodiment of the present invention.

Figure 8 illustrates a description tree for the contents file layout of the digital work illustrated in Figure 5.

Figure 9 illustrates a portion of a description tree corresponding to the individual digital work illustrated in Figure 6.

Figure 10 illustrates a layout for the rights portion of a description block as may be utilized in the currently preferred embodiment of the present invention.

Figure 11 is a description tree wherein certain d-blocks have PRINT usage rights and is used to illustrate "strict" and "lenient" rules for resolving usage rights conflicts.

Figure 12 is a block diagram of the hardware components of a repository as are utilized in the currently preferred embodiment of the present invention.

Figure 13 is a block diagram of the functional (logical) components of a repository as are utilized in the currently preferred embodiment of the present invention.

Figure 14 is diagram illustrating the basic components of a usage right in the currently preferred embodiment of the present invention.

Figure 15 lists the usage rights grammar of the currently preferred embodiment of the present invention.

Figure 16 is a flowchart illustrating the steps of certificate delivery, hotlist checking and performance testing as performed in a registration

transaction as may be performed in the currently preferred embodiment of the present invention.

Figure 17 is a flowchart illustrating the steps of session information exchange and clock synchronization as may be performed in the currently preferred embodiment of the present invention, after each repository in the registration transaction has successfully completed the steps described in Figure 16.

Figure 18 is a flowchart illustrating the basic flow for a usage transaction, including the common opening and closing step, as may be performed in the currently preferred embodiment of the present invention.

Figure 19 is a state diagram of server and client repositories in accordance with a transport protocol followed when moving a digital work from the server to the client repositories, as may be performed in the currently preferred embodiment of the present invention.

Detailed Description of the Preferred Embodiment

TABLE OF CONTENTS

	Page No.
<u>OVERVIEW</u>	15
<u>RENDERING SYSTEMS</u>	19
<u>STRUCTURE OF DIGITAL WORKS</u>	21
<u>ATTACHING USAGE RIGHTS TO A DIGITAL WORK</u>	26
<i>Resolving Conflicting Rights</i>	27
<u>REPOSITORIES</u>	28
<i>Repository Security Classes</i>	35
<i>Repository User Interface</i>	37
<u>CREDIT SERVERS</u>	38
<u>USAGE RIGHTS LANGUAGE</u>	40
<i>Copy Count Specification</i>	48
<i>Control Specification</i>	48
<i>Time Specification</i>	49
<i>Security Class and Authorization Specification</i>	51
<i>Usage Fees and Incentives Specification</i>	54
<i>Examples of Sets of Usage Rights</i>	58
<u>REPOSITORY TRANSACTIONS</u>	61
<i>Message Transmission</i>	62
<i>Session Initiation Transactions</i>	63
<i>Billing Transactions</i>	69
<i>Usage Transactions</i>	71
<i>Transmission Protocol</i>	76

	Page No.
The Copy Transaction	80
The Transfer Transaction.....	81
The Loan Transaction	82
The Play Transaction	85
The Print Transaction	86
The Backup Transaction.....	88
The Restore Transaction.....	89
The Delete Transaction.....	91
The Directory Transaction	91
The Folder Transaction	92
The Extract Transaction	93
The Embed Transaction.....	94
The Edit Transaction	95
The Authorization Transaction.....	97
The Install Transaction	99
The Uninstall Transaction.....	101
<u>DISTRIBUTION AND USE SCENARIOS.....</u>	103
APPENDIX A GLOSSARY.....	120

OVERVIEW

A system for controlling use and distribution of digital works is disclosed. The present invention is directed to supporting commercial transactions involving digital works. The transition to digital works profoundly and fundamentally changes how creativity and commerce can work. It changes the cost of transporting or storing works because digital property is almost "massless." Digital property can be transported at electronic speeds and requires almost no warehousing. Keeping an unlimited supply of virtual copies on hand requires essentially no more space than keeping one copy on hand. The digital medium also lowers the costs of alteration, reuse and billing.

There is a market for digital works because creators are strongly motivated to reuse portions of digital works from others rather than creating their own completely. This is because it is usually so much easier to use an existing stock photo or music clip than to create a new one from scratch.

Herein the terms "digital work", "work" and "content" refer to any work that has been reduced to a digital representation. This would include any audio, video, text, or multimedia work and any accompanying interpreter (e.g. software) that may be required for recreating the work. The term composite work refers to a digital work comprised of a collection of other digital works. The term "usage rights" or "rights" is a term which refers to rights granted to a recipient of a digital work. Generally, these rights define how a digital work can be used and if it can be further distributed. Each

usage right may have one or more specified conditions which must be satisfied before the right may be exercised. Appendix 1 provides a Glossary of the terms used herein.

A key feature of the present invention is that usage rights are permanently "attached" to the digital work. Copies made of a digital work will also have usage rights attached. Thus, the usage rights and any associated fees assigned by a creator and subsequent distributor will always remain with a digital work.

The enforcement elements of the present invention are embodied in repositories. Among other things, repositories are used to store digital works, control access to digital works, bill for access to digital works and maintain the security and integrity of the system.

The combination of attached usage rights and repositories enable distinct advantages over prior systems. As noted in the prior art, payment of fees are primarily for the initial access. In such approaches, once a work has been read, computational control over that copy is gone. Metaphorically, "the content genie is out of the bottle and no more fees can be billed." In contrast, the present invention never separates the fee descriptions from the work. Thus, the digital work genie only moves from one trusted bottle (repository) to another, and all uses of copies are potentially controlled and billable.

Figure 1 is a high level flowchart omitting various details but which demonstrates the basic operation of the present invention. Referring to

Figure 1, a creator creates a digital work, step 101. The creator will then determine appropriate usage rights and fees, attach them to the digital work, and store them in Repository 1, step 102. The determination of appropriate usage rights and fees will depend on various economic factors. The digital work remains securely in Repository 1 until a request for access is received. The request for access begins with a session initiation by another repository. Here a Repository 2 initiates a session with Repository 1, step 103. As will be described in greater detail below, this session initiation includes steps which helps to insure that the respective repositories are trustworthy. Assuming that a session can be established, Repository 2 may then request access to the Digital Work for a stated purpose, step 104. The purpose may be, for example, to print the digital work or to obtain a copy of the digital work. The purpose will correspond to a specific usage right. In any event, Repository 1 checks the usage rights associated with the digital work to determine if the access to the digital work may be granted, step 105. The check of the usage rights essentially involves a determination of whether a right associated with the access request has been attached to the digital work and if all conditions associated with the right are satisfied. If the access is denied, repository 1 terminates the session with an error message, step 106. If access is granted, repository 1 transmits the digital work to repository 2, step 107. Once the digital work has been transmitted to repository 2, repository 1 and 2 each generate billing information for the access which is transmitted to a credit server, step 108. Such double billing reporting is done to insure against attempts to circumvent the billing process.

Figure 2 illustrates the basic interactions between repository types in the present invention. As will become apparent from Figure 2, the various repository types will serve different functions. It is fundamental that repositories will share a core set of functionality which will enable secure and trusted communications. Referring to Figure 2, a repository 201 represents the general instance of a repository. The repository 201 has two modes of operation; a server mode and a requester mode. When in the server mode, the repository will be receiving and processing access requests to digital works. When in the requester mode, the repository will be initiating requests to access digital works. Repository 201 is general in the sense that it's primary purpose is as an exchange medium for digital works. During the course of operation, the repository 201 may communicate with a plurality of other repositories, namely authorization repository 202, rendering repository 203 and master repository 204. Communication between repositories occurs utilizing a repository transaction protocol 205.

Communication with an authorization repository 202 may occur when a digital work being accessed has a condition requiring an authorization. Conceptually, an authorization is a digital certificate such that possession of the certificate is required to gain access to the digital work. An authorization is itself a digital work that can be moved between repositories and subjected to fees and usage rights conditions. An authorization may be required by both repositories involved in an access to a digital work.

Communication with a rendering repository 203 occurs in connection with the rendering of a digital work. As will be described in greater detail

below, a rendering repository is coupled with a rendering device (e.g. a printer device) to comprise a rendering system.

Communication with a master repository 205 occurs in connection with obtaining an identification certificate. Identification certificates are the means by which a repository is identified as "trustworthy". The use of identification certificates is described below with respect to the registration transaction.

Figure 3 illustrates the repository 201 coupled to a credit server 301. The credit server 301 is a device which accumulates billing information for the repository 201. The credit server 301 communicates with repository 201 via billing transactions 302 to record billing transactions. Billing transactions are reported to a billing clearinghouse 303 by the credit server 301 on a periodic basis. The credit server 301 communicates to the billing clearinghouse 303 via clearinghouse transactions 304. The clearinghouse transactions 304 enable a secure and encrypted transmission of information to the billing clearinghouse 303.

RENDERING SYSTEMS

A rendering system is generally defined as a system comprising a repository and a rendering device which can render a digital work into its desired form. Examples of a rendering system may be a computer system, a digital audio system, or a printer. A rendering system has the same security features as a repository. The coupling of a rendering repository with the

rendering device may occur in a manner suitable for the type of rendering device.

Figure 4a illustrates a printer as an example of a rendering system. Referring to Figure 4, printer system 401 has contained therein a printer repository 402 and a print device 403. It should be noted that the dashed line defining printer system 401 defines a secure system boundary. Communications within the boundary is assumed to be secure. Depending on the security level, the boundary also represents a barrier intended to provide physical integrity. The printer repository 402 is an instantiation of the rendering repository 205 of Figure 2. The printer repository 402 will in some instances contain an ephemeral copy of a digital work which remains until it is printed out by the print engine 403. In other instances, the printer repository 402 may contain digital works such as fonts, which will remain and can be billed based on use. This design assures that all communication lines between printers and printing devices are encrypted, unless they are within a physically secure boundary. This design feature eliminates a potential "fault" point through which the digital work could be improperly obtained. The printer device 403 represents the printer components used to create the printed output.

Also illustrated in Figure 4a is the repository 404. The repository 404 is coupled to the printer repository 402. The repository 404 represents an external repository which contains digital works.

Figure 4b is an example of a computer system as a rendering system. A computer system may constitute a "multi-function" device since it may

execute digital works (e.g. software programs) and display digital works (e.g. a digitized photograph). Logically, each rendering device can be viewed as having its own repository, although only one physical repository is needed. Referring to Figure 4b, a computer system 410 has contained therein a display/execution repository 411. The display/execution repository 411 is coupled to display device, 412 and execution device 413. The dashed box surrounding the computer system 410 represents a security boundary within which communications are assumed to be secure. The display/execution repository 411 is further coupled to a credit server 414 to report any fees to be billed for access to a digital work and a repository 415 for accessing digital works stored therein.

STRUCTURE OF DIGITAL WORKS

Usage rights are attached directly to digital works. Thus, it is important to understand the structure of a digital work. The structure of a digital work, in particular composite digital works, may be naturally organized into an acyclic structure such as a hierarchy. For example, a magazine has various articles and photographs which may have been created and are owned by different persons. Each of the articles and photographs may represent a node in a hierarchical structure. Consequently, controls, i.e. usage rights, may be placed on each node by the creator. By enabling control and fee billing to be associated with each node, a creator of a work can be assured that the rights and fees are not circumvented.

In the currently preferred embodiment, the file information for a digital work is divided into two files: a "contents" file and a "description tree" file. From the perspective of a repository, the "contents" file is a stream of addressable bytes whose format depends completely on the interpreter used to play, display or print the digital work. The description tree file makes it possible to examine the rights and fees for a work without reference to the content of the digital work. It should be noted that the term description tree as used herein refers to any type of acyclic structure used to represent the relationship between the various components of a digital work.

Figure 5 illustrates the layout of a contents file. Referring to Figure 5, a digital work 509 is comprised of story A 510, advertisement 511, story B 512 and story C 513. It is assumed that the digital work is stored starting at a relative address of 0. Each of the parts of the digital work are stored linearly so that story A 510 is stored at approximately addresses 0-30,000, advertisement 511 at addresses 30,001-40,000, story B 512 at addresses 40,001-60,000 and story C 513 at addresses 60,001-85K. The detail of story A 510 is illustrated in Figure 6. Referring to Figure 6, the story A 510 is further broken down to show text 614 stored at address 0-1500, soldier photo 615 at addresses 1501-10,000, graphics 616 stored at addresses 10,001-25,000 and sidebar 617 stored address 25,001-30,000. Note that the data in the contents file may be compressed (for saving storage) or encrypted (for security).

From Figures 5 and 6 it is readily observed that a digital work can be represented by its component parts as a hierarchy. The description tree for a

digital work is comprised of a set of related descriptor blocks (d-blocks). The contents of each d-block is described with respect to Figure 7. Referring to Figure 7, a d-block 700 includes an identifier 701 which is a unique identifier for the work in the repository, a starting address 702 providing the start address of the first byte of the work, a length 703 giving the number of bytes in the work, a rights portion 704 wherein the granted usage rights and their status data are maintained, a parent pointer 705 for pointing to a parent d-block and child pointers 706 for pointing to the child d-blocks. In the currently preferred embodiment, the identifier 701 has two parts. The first part is a unique number assigned to the repository upon manufacture. The second part is a unique number assigned to the work upon creation. The rights portion 704 will contain a data structure, such as a look-up table, wherein the various information associated with a right is maintained. The information required by the respective usage rights is described in more detail below. D-blocks form a strict hierarchy. The top d-block of a work has no parent; all other d-blocks have one parent. The relationship of usage rights between parent and child d-blocks and how conflicts are resolved is described below.

A special type of d-block is a "shell" d-block. A shell d-block adds no new content beyond the content of its parts. A shell d-block is used to add rights and fee information, typically by distributors of digital works.

Figure 8 illustrates a description tree for the digital work of Figure 5. Referring to Figure 8, a top d-block 820 for the digital work points to the various stories and advertisements contained therein. Here, the top d-block

820 points to d-block 821 (representing story A 510), d-block 822 (representing the advertisement 511), d-block 823 (representing story B 512) and and d-block 824 (representing story C 513).

The portion of the description tree for Story A 510 is illustrated in Figure 9. D-block 925 represents text 614, d-block 926 represents photo 615, d-block 927 represents graphics 616 by and d-block 928 represents sidebar 617.

The rights portion 704 of a descriptor block is further illustrated in Figure 10. Figure 10 illustrates a structure which is repeated in the rights portion 704 for each right. Referring to Figure 10, each right will have a right code field 1001 and status information field 1002. The right code field 1001 will contain a unique code assigned to a right. The status information field 1002 will contain information relating to the state of a right and the digital work. Such information is indicated below in Table 1. The rights as stored in the rights portion 304 may typically be in numerical order based on the right code.

The approach for representing digital works by separating description data from content assumes that parts of a file are contiguous but takes no position on the actual representation of content. In particular, it is neutral to the question of whether content representation may take an object oriented approach. It would be natural to represent content as objects. In principle, it may be convenient to have content objects that include the billing structure and rights information that is represented in the d-blocks. Such variations in the design of the representation are possible and are

Property	Value	Use
Copies -in- Use	Number	A counter of the number of copies of a work that are in use. Incremented when another copy is used; decremented when use is completed.
Loan-Period	Time-Units	Indicator of the maximum number of time-units that a document can be loaned out
Loaner-Copy	Boolean	Indicator that the current work is a loaned out copy of an authorized digital work.
Remaining-Time	Time-Units	Indicator of the remaining time of use on a metered document right.
Document- Descr	String	A string containing various identifying information about a document. The exact format of this is not specified, but it can include information such as a publisher name, author name, ISBN number, and so on.
Revenue- Owner	RO-Descr	A handle identifying a revenue owner for a digital work. This is used for reporting usage fees.
Publication- Date	Date-Descr	The date that the digital work was published.
History-list	History-Rec	A list of events recording the repostories and dates for operations that copy, transfer, backup, or restore a digital work.

TABLE 1
DIGITAL WORK STATE INFORMATION

viable alternatives but may introduce processing overhead, e.g. the interpretation of the objects.

Digital works are stored in a repository as part of a hierarchical file system. Folders (also termed directories and sub-directories) contain the digital works as well as other folders. Digital works and folders in a folder

are ordered in alphabetical order. The digital works are typed to reflect how the files are used. Usage rights can be attached to folders so that the folder itself is treated as a digital work. Access to the folder would then be handled in the same fashion as any other digital work. As will be described in more detail below, the contents of the folder are subject to their own rights. Moreover, file management rights may be attached to the folder which define how folder contents can be managed.

ATTACHING USAGE RIGHTS TO A DIGITAL WORK

It is fundamental to the present invention that the usage rights are treated as part of the digital work. As the digital work is distributed, the scope of the granted usage rights will remain the same or may be narrowed. For example, when a digital work is transferred from a document server to a repository, the usage rights may include the right to loan a copy for a predetermined period of time (called the original rights). When the repository loans out a copy of the digital work, the usage rights in the loaner copy (called the next set of rights) could be set to prohibit any further rights to loan out the copy. The basic idea is that one cannot grant more rights than they have.

The attachment of usage rights into a digital work may occur in a variety of ways. If the usage rights will be the same for an entire digital work, they could be attached when the digital work is processed for deposit in the digital work server. In the case of a digital work having different usage rights for the various components, this can be done as the digital work is being created. An authoring tool or digital work assembling tool could be

utilized which provides for an automated process of attaching the usage rights.

As will be described below, when a digital work is copied, transferred or loaned, a "next set of rights" can be specified. The "next set of rights" will be attached to the digital work as it is transported.

Resolving Conflicting Rights

Because each part of a digital work may have its own usage rights, there will be instances where the rights of a "contained part" are different from its parent or container part. As a result, conflict rules must be established to dictate when and how a right may be exercised. The hierarchical structure of a digital work facilitates the enforcement of such rules. A "strict" rule would be as follows: a right for a part in a digital work is sanctioned if and only if it is sanctioned for the part, for ancestor d-blocks containing the part and for all descendent d-blocks. By sanctioned, it is meant that (1) each of the respective parts must have the right, and (2) any conditions for exercising the right are satisfied.

It also possible to implement the present invention using a more lenient rule. In the more lenient rule, access to the part may be enabled to the descendent parts which have the right, but access is denied to the descendents which do not.

Example of applying both the strict rule and lenient is illustrated with reference to Figure 11. Referring to Figure 11, a root d-block 1101 has child d-blocks 1102-1105. In this case, root d-block represents a magazine, and each of the child d-blocks 1102-1105 represent articles in the magazine. Suppose that a request is made to PRINT the digital work represented by root d-block 1101 wherein the strict rule is followed. The rights for the root d-block 1101 and child d-blocks 1102-1105 are then examined. Root d-block 1101 and child d-blocks 1102 and 1105 have been granted PRINT rights. Child d-block 1103 has not been granted PRINT rights and child d-block 1104 has PRINT rights conditioned on payment of a usage fee.

Under the strict rule the PRINT right cannot be exercised because the child d-block does not have the PRINT right. Under the lenient rule, the result would be different. The digital works represented by child d-blocks 1102 and 1105 could be printed and the digital work represented by d-block 1104 could be printed so long as the usage fee is paid. Only the digital work represented by d-block 1103 could not be printed. This same result would be accomplished under the strict rule if the requests were directed to each of the individual digital works.

The present invention supports various combinations of allowing and disallowing access. Moreover, as will be described below, the usage rights grammar permits the owner of a digital work to specify if constraints may be imposed on the work by a container part. The manner in which digital

works may be sanctioned because of usage rights conflicts would be implementation specific and would depend on the nature of the digital works.

REPOSITORIES

Many of the powerful functions of repositories -- such as their ability to "loan" digital works or automatically handle the commercial reuse of digital works -- are possible because they are trusted systems. The systems are trusted because they are able to take responsibility for fairly and reliably carrying out the commercial transactions. That the systems can be responsible ("able to respond") is fundamentally an issue of integrity. The integrity of repositories has three parts: physical integrity, communications integrity, and behavioral integrity.

Physical integrity refers to the integrity of the physical devices themselves. Physical integrity applies both to the repositories and to the protected digital works. Thus, the higher security classes of repositories themselves may have sensors that detect when tampering is attempted on their secure cases. In addition to protection of the repository itself, the repository design protects access to the content of digital works. In contrast with the design of conventional magnetic and optical devices -- such as floppy disks, CD-ROMs, and videotapes -- repositories never allow non-trusted systems to access the works directly. A maker of generic computer systems cannot guarantee that their platform will not be used to make unauthorized copies. The manufacturer provides generic capabilities for reading and writing information, and the general nature of the functionality

of the general computing device depends on it. Thus, a copy program can copy arbitrary data. This copying issue is not limited to general purpose computers. It also arises for the unauthorized duplication of entertainment "software" such as video and audio recordings by magnetic recorders. Again, the functionality of the recorders depends on their ability to copy and they have no means to check whether a copy is authorized. In contrast, repositories prevent access to the raw data by general devices and can test explicit rights and conditions before copying or otherwise granting access. Information is only accessed by protocol between trusted repositories.

Communications integrity refers to the integrity of the communications channels between repositories. Roughly speaking, communications integrity means that repositories cannot be easily fooled by "telling them lies." Integrity in this case refers to the property that repositories will only communicate with other devices that are able to present proof that they are certified repositories, and furthermore, that the repositories monitor the communications to detect "impostors" and malicious or accidental interference. Thus the security measures involving encryption, exchange of digital certificates, and nonces described below are all security measures aimed at reliable communication in a world known to contain active adversaries.

Behavioral integrity refers to the integrity in what repositories do. What repositories do is determined by the software that they execute. The integrity of the software is generally assured only by knowledge of its source. Restated, a user will trust software purchased at a reputable

computer store but not trust software obtained off a random (insecure) server on a network. Behavioral integrity is maintained by requiring that repository software be certified and be distributed with proof of such certification, i.e. a digital certificate. The purpose of the certificate is to authenticate that the software has been tested by an authorized organization, which attests that the software does what it is supposed to do and that it does not compromise the behavioral integrity of a repository. If the digital certificate cannot be found in the digital work or the master repository which generated the certificate is not known to the repository receiving the software, then the software cannot be installed.

In the description of Figure 2, it was indicated that repositories come in various forms. All repositories provide a core set of services for the transmission of digital works. The manner in which digital works are exchanged is the basis for all transaction between repositories. The various repository types differ in the ultimate functions that they perform. Repositories may be devices themselves, or they may be incorporated into other systems. An example is the rendering repository 205 of Figure 2.

A repository will have associated with it a repository identifier. Typically, the repository identifier would be a unique number assigned to the repository at the time of manufacture. Each repository will also be classified as being in a particular security class. Certain communications and transactions may be conditioned on a repository being in a particular security class. The various security classes are described in greater detail below.

As a prerequisite to operation, a repository will require possession of an identification certificate. Identification certificates are encrypted to prevent forgery and are issued by a Master repository. A master repository plays the role of an authorization agent to enable repositories to receive digital works. Identification certificates must be updated on a periodic basis. Identification certificates are described in greater detail below with respect to the registration transaction.

A repository has both a hardware and functional embodiment. The functional embodiment is typically software executing on the hardware embodiment. Alternatively, the functional embodiment may be embedded in the hardware embodiment such as an Application Specific Integrated Circuit (ASIC) chip.

The hardware embodiment of a repository will be enclosed in a secure housing which if compromised, may cause the repository to be disabled. The basic components of the hardware embodiment of a repository are described with reference to Figure 12. Referring to Figure 12, a repository is comprised of a processing means 1200, storage system 1207, clock 1205 and external interface 1206. The processing means 1200 is comprised of a processor element 1201 and processor memory 1202. The processing means 1201 provides controller, repository transaction and usage rights transaction functions for the repository. Various functions in the operation of the repository such as decryption and/or decompression of digital works and transaction messages are also performed by the processing means 1200. The processor element 1201 may be a microprocessor or other suitable

computing component. The processor memory 1202 would typically be further comprised of Read Only Memories (ROM) and Random Access Memories (RAM). Such memories would contain the software instructions utilized by the processor element 1201 in performing the functions of the repository.

The storage system 1207 is further comprised of descriptor storage 1203 and content storage 1204. The description tree storage 1203 will store the description tree for the digital work and the content storage will store the associated content. The description tree storage 1203 and content storage 1204 need not be of the same type of storage medium, nor are they necessarily on the same physical device. So for example, the descriptor storage 1203 may be stored on a solid state storage (for rapid retrieval of the description tree information), while the content storage 1204 may be on a high capacity storage such as an optical disk.

The clock 1205 is used to time-stamp various time based conditions for usage rights or for metering usage fees which may be associated with the digital works. The clock 1205 will have an uninterruptable power supply, e.g. a battery, in order to maintain the integrity of the time-stamps. The external interface means 1206 provides for the signal connection to other repositories and to a credit server. The external interface means 1206 provides for the exchange of signals via such standard interfaces such as RS-232 or Personal Computer Manufacturers Card Industry Association (PCMCIA) standards, or FDDI. The external interface means 1206 may also provide network connectivity.

The functional embodiment of a repository is described with reference to Figure 13. Referring to Figure 13, the functional embodiment is comprised of an operating system 1301, core repository services 1302, usage transaction handlers 1303, repository specific functions, 1304 and a user interface 1305. The operating system 1301 is specific to the repository and would typically depend on the type of processor being used. The operating system 1301 would also provide the basic services for controlling and interfacing between the basic components of the repository.

The core repository services 1302 comprise a set of functions required by each and every repository. The core repository services 1302 include the session initiation transactions which are defined in greater detail below. This set of services also includes a generic ticket agent which is used to "punch" a digital ticket and a generic authorization server for processing authorization specifications. Digital tickets and authorizations are specific mechanisms for controlling the distribution and use of digital works and are described in more detail below. Note that coupled to the core repository services are a plurality of identification certificates 1306. The identification certificates 1306 are required to enable the use of the repository.

The usage transactions handler 1303 comprise functionality for processing access requests to digital works and for billing fees based on access. The usage transactions supported will be different for each repository type. For example, it may not be necessary for some repositories to handle access requests for digital works.

The repository specific functionality 1304 comprises functionality that is unique to a repository. For example, the master repository has special functionality for issuing digital certificates and maintaining encryption keys. The repository specific functionality 1304 would include the user interface implementation for the repository.

Repository Security Classes

For some digital works the losses caused by any individual instance of unauthorized copying is insignificant and the chief economic concern lies in assuring the convenience of access and low-overhead billing. In such cases, simple and inexpensive handheld repositories and network-based workstations may be suitable repositories, even though the measures and guarantees of security are modest.

At the other extreme, some digital works such as a digital copy of a first run movie or a bearer bond or stock certificate would be of very high value so that it is prudent to employ caution and fairly elaborate security measures to ensure that they are not copied or forged. A repository suitable for holding such a digital work could have elaborate measures for ensuring physical integrity and for verifying authorization before use.

By arranging a universal protocol, all kinds of repositories can communicate with each other in principle. However, creators of some works will want to specify that their works will only be transferred to repositories whose level of security is high enough. For this reason, document repositories have a ranking system for classes and levels of security. The

security classes in the currently preferred embodiment are described in Table 2.

Level	Description of Security
0	Open system. Document transmission is unencrypted. No digital certificate is required for identification. The security of the system depends mostly on user honesty, since only modest knowledge may be needed to circumvent the security measures. The repository has no provisions for preventing unauthorized programs from running and accessing or copying files. The system does not prevent the use of removable storage and does not encrypt stored files.
1	Minimal security. Like the previous class except that stored files are minimally encrypted, including ones on removable storage.
2	Basic security. Like the previous class except that special tools and knowledge are required to compromise the programming, the contents of the repository, or the state of the clock. All digital communications are encrypted. A digital certificate is provided as identification. Medium level encryption is used. Repository identification number is unforgeable.
3	General security. Like the previous class plus the requirement of special tools are needed to compromise the physical integrity of the repository and that modest encryption is used on all transmissions. Password protection is required to use the local user interface. The digital clock system cannot be reset without authorization. No works would be stored on removable storage. When executing works as programs, it runs them in their own address space and does not give them direct access to any file storage or other memory containing system code or works. They can access works only through the transmission transaction protocol.
4	Like the previous class except that high level encryption is used on all communications. Sensors are used to record attempts at physical and electronic tampering. After such tampering, the repository will not perform other transactions until it has reported such tampering to a designated server.
5	Like the previous class except that if the physical or digital attempts at tampering exceed some preset thresholds that threaten the physical integrity of the repository or the integrity of digital and cryptographic barriers, then the repository will save only document description records of history but will erase or destroy any digital identifiers that could be misused if released to an unscrupulous party. It also modifies any certificates of authenticity to indicate that the physical system has been compromised. It also erases the contents of designated documents.

TABLE 2
REPOSITORY SECURITY LEVELS

Level	Description of Security
6	Like the previous class except that the repository will attempt wireless communication to report tampering and will employ noisy alarms.
10	This would correspond to a very high level of security. This server would maintain constant communications to remote security systems reporting transactions, sensor readings, and attempts to circumvent security.

TABLE 2
REPOSITORY SECURITY LEVELS

The characterization of security levels described in Table 2 is not intended to be fixed. More important is the idea of having different security levels for different repositories. It is anticipated that new security classes and requirements will evolve according to social situations and changes in technology.

Repository User Interface

A user interface is broadly defined as the mechanism by which a user interacts with a repository in order to invoke transactions to gain access to a digital work, or exercise usage rights. As described above, a repository may be embodied in various forms. The user interface for a repository will differ depending on the particular embodiment. The user interface may be a graphical user interface having icons representing the digital works and the various transactions that may be performed. The user interface may be a generated dialog in which a user is prompted for information.

The user interface itself need not be part of the repository. As a repository may be embedded in some other device, the user interface may

merely be a part of the device in which the repository is embedded. For example, the repository could be embedded in a "card" that is inserted into an available slot in a computer system. The user interface may be combination of a display, keyboard, cursor control device and software executing on the computer system.

At a minimum, the user interface must permit a user to input information such as access requests and alpha numeric data and provide feedback as to transaction status. The user interface will then cause the repository to initiate the suitable transactions to service the request. Other facets of a particular user interface will depend on the functionality that a repository will provide.

CREDIT SERVERS

In the present invention, fees may be associated with the exercise of a right. The requirement for payment of fees is described with each version of a usage right in the usage rights language. The recording and reporting of such fees is performed by the credit server. One of the capabilities enabled by associating fees with rights is the possibility of supporting a wide range of charging models. The simplest model, used by conventional software, is that there is a single fee at the time of purchase, after which the purchaser obtains unlimited rights to use the work as often and for as long as he or she wants. Alternative models, include metered use and variable fees. A single work can have different fees for different uses. For example, viewing a photograph on a display could have different fees than making a hardcopy or including it in a newly created work. A key to these alternative charging

models is to have a low overhead means of establishing fees and accounting for credit on these transactions.

A credit server is a computational system that reliably authorizes and records these transactions so that fees are billed and paid. The credit server reports fees to a billing clearinghouse. The billing clearinghouse manages the financial transactions as they occur. As a result, bills may be generated and accounts reconciled. Preferably, the credit server would store the fee transactions and periodically communicate via a network with billing clearinghouse for reconciliation. In such an embodiment, communications with the billing clearinghouse would be encrypted for integrity and security reasons. In another embodiment, the credit server acts as a "debit card" where transactions occur in "real-time" against a user account.

A credit server is comprised of memory, a processing means, a clock, and interface means for coupling to a repository and a financial institution (e.g. a modem). The credit server will also need to have security and authentication functionality. These elements are essentially the same elements as those of a repository. Thus, a single device can be both a repository and a credit server, provided that it has the appropriate processing elements for carrying out the corresponding functions and protocols. Typically, however, a credit server would be a card-sized system in the possession of the owner of the credit. The credit server is coupled to a repository and would interact via financial transactions as described below. Interactions with a financial institution may occur via protocols established by the financial institutions themselves.

In the currently preferred embodiment credit servers associated with both the server and the repository report the financial transaction to the billing clearinghouse. For example, when a digital work is copied by one repository to another for a fee, credit servers coupled to each of the repositories will report the transaction to the billing clearinghouse. This is desirable in that it insures that a transaction will be accounted for in the event of some break in the communication between a credit server and the billing clearinghouse. However, some implementations may embody only a single credit server reporting the transaction to minimize transaction processing at the risk of losing some transactions.

USAGE RIGHTS LANGUAGE

The present invention uses statements in a high level "usage rights language" to define rights associated with digital works and their parts. Usage rights statements are interpreted by repositories and are used to determine what transactions can be successfully carried out for a digital work and also to determine parameters for those transactions. For example, sentences in the language determine whether a given digital work can be copied, when and how it can be used, and what fees (if any) are to be charged for that use. Once the usage rights statements are generated, they are encoded in a suitable form for accessing during the processing of transactions.

Defining usage rights in terms of a language in combination with the hierarchical representation of a digital work enables the support of a wide

variety of distribution and fee schemes. An example is the ability to attach multiple versions of a right to a work. So a creator may attach a PRINT right to make 5 copies for \$10.00 and a PRINT right to make unlimited copies for \$100.00. A purchaser may then choose which option best fits his needs. Another example is that rights and fees are additive. So in the case of a composite work, the rights and fees of each of the components works is used in determining the rights and fees for the work as a whole. Other features and benefits of the usage rights language will become apparent in the description of distribution and use scenarios provided below.

The basic contents of a right are illustrated in Figure 14. Referring to Figure 14, a right 1450 has a transactional component 1451 and a specifications component 1452. A right 1450 has a label (e.g. COPY or PRINT) which indicate the use or distribution privileges that are embodied by the right. The transactional component 1451 corresponds to a particular way in which a digital work may be used or distributed. The transactional component 1451 is typically embodied in software instructions in a repository which implement the use or distribution privileges for the right. The specifications components 1452 are used to specify conditions which must be satisfied prior to the right being exercised or to designate various transaction related parameters. In the currently preferred embodiment, these specifications include copy count 1453, Fees and Incentives 1454, Time 1455, Access and Security 1456 and Control 1457. Each of these specifications will be described in greater detail below with respect to the language grammar elements.

The usage rights language is based on the grammar described below. A grammar is a convenient means for defining valid sequence of symbols for a language. In describing the grammar the notation "[a | b | c]" is used to indicate distinct choices among alternatives. In this example, a sentence can have either an "a", "b" or "c". It must include exactly one of them. The braces { } are used to indicate optional items. Note that brackets, bars and braces are used to describe the language of usage rights sentences but do not appear in actual sentences in the language.

In contrast, parentheses are part of the usage rights language. Parentheses are used to group items together in lists. The notation (x*) is used to indicate a variable length list, that is, a list containing one or more items of type x. The notation (x)* is used to indicate a variable number of lists containing x.

Keywords in the grammar are words followed by colons. Keywords are a common and very special case in the language. They are often used to indicate a single value, typically an identifier. In many cases, the keyword and the parameter are entirely optional. When a keyword is given, it often takes a single identifier as its value. In some cases, the keyword takes a list of identifiers.

In the usage rights language, time is specified in an hours:minutes:seconds (or hh:mm:ss) representation. Time zone indicators, e.g. PDT for Pacific Daylight Time, may also be specified. Dates are represented as year/ month/day (or YYYY/MMM/DD). Note that these time

and date representations may specify moments in time or units of time
Money units are specified in terms of dollars.

Finally, in the usage rights language, various "things" will need to interact with each other. For example, an instance of a usage right may specify a bank account, a digital ticket, etc.. Such things need to be identified and are specified herein using the suffix "-ID."

The Usage Rights Grammar is listed in it's entirety in Figure 15 and is described below.

Grammar element 1501 "**Digital Work Rights := (Rights*)**" define the digital work rights as a set of rights. The set of rights attached to a digital work define how that digital work may be transferred, used, performed or played. A set of rights will attach to the entire digital work and in the case of compound digital works, each of the components of the digital work. The usage rights of components of a digital may be different.

Grammar element 1502 "**Right := (Right-Code {Copy-Count} {Control-Spec} {Time-Spec } {Access-Spec} {Fee-Spec})**" enumerates the content of a right. Each usage right must specify a right code. Each right may also optionally specify conditions which must be satisfied before the right can be exercised. These conditions are copy count, control, time, access and fee conditions. In the currently preferred embodiment, for the optional elements, the following defaults apply: copy count equals 1, no time limit on the use of the right, no access tests or a security level required to use the

right and no fee is required. These conditions will each be described in greater detail below.

It is important to note that a digital work may have multiple versions of a right, each having the same right code. The multiple version would provide alternative conditions and fees for accessing the digital work.

Grammar element 1503 "**Right-Code := Render-Code | Transport-Code | File-Management-Code | Derivative-Works-Code | Configuration-Code**" distinguishes each of the specific rights into a particular right type (although each right is identified by distinct right codes). In this way, the grammar provides a catalog of possible rights that can be associated with parts of digital works. In the following, rights are divided into categories for convenience in describing them.

Grammar element 1504 "**Render-Code := [Play : {Player: Player-ID} | Print: {Printer: Printer-ID}]**" lists a category of rights all involving the making of ephemeral, transitory, or non-digital copies of the digital work. After use the copies are erased.

- **Play** A process of rendering or performing a digital work on some processor. This includes such things as playing digital movies, playing digital music, playing a video game, running a computer program, or displaying a document on a display.
- **Print** To render the work in a medium that is not further protected by usage rights, such as printing on paper.

Grammar element 1505 "**Transport-Code := [Copy | Transfer | Loan {Remaining-Rights: Next-Set-of-Rights}]{(Next-Copy-Rights: Next-Set of Rights)}**" lists a category of rights involving the making of persistent, usable copies of the digital work on other repositories. The optional Next-Copy-Rights determine the rights on the work after it is transported. If this is not specified, then the rights on the transported copy are the same as on the original. The optional Remaining-Rights specify the rights that remain with a digital work when it is loaned out. If this is not specified, then the default is that no rights can be exercised when it is loaned out.

- Copy Make a new copy of a work
- Transfer Moving a work from one repository to another.
- Loan Temporarily loaning a copy to another repository for a specified period of time.

Grammar element 1506 "**File-Management-Code := Backup {Back-Up-Copy-Rights: Next-Set -of Rights}| Restore | Delete | Folder | Directory {Name:Hide-Local | Hide -Remote}{Parts:Hide-Local | Hide-Remote}**" lists a category of rights involving operations for file management, such as the making of backup copies to protect the copy owner against catastrophic equipment failure.

Many software licenses and also copyright law give a copy owner the right to make backup copies to protect against catastrophic failure of equipment. However, the making of uncontrolled backup copies is

inherently at odds with the ability to control usage, since an uncontrolled backup copy can be kept and then restored even after the authorized copy was sold.

The File management rights enable the making and restoring of backup copies in a way that respects usage rights, honoring the requirements of both the copy owner and the rights grantor and revenue owner. Backup copies of work descriptions (including usage rights and fee data) can be sent under appropriate protocol and usage rights control to other document repositories of sufficiently high security. Further rights permit organization of digital works into folders which themselves are treated as digital works and whose contents may be "hidden" from a party seeking to determine the contents of a repository.

- **Backup** To make a backup copy of a digital work as protection against media failure.
- **Restore** To restore a backup copy of a digital work.
- **Delete** To delete or erase a copy of a digital work.
- **Folder** To create and name folders, and to move files and folders between folders.
- **Directory** To hide a folder or it's contents.

Grammar element 1507 **"Derivative-Works-Code: [Extract |
Embed | Edit {Process: Process-ID}] {Next-Copy-Rights : Next-Set-of**

Rights}" lists a category of rights involving the use of a digital work to create new works.

- **Extract** To remove a portion of a work, for the purposes of creating a new work.
- **Embed** To include a work in an existing work.
- **Edit** To alter a digital work by copying, selecting and modifying portions of an existing digital work.

Grammar element 1508 "**Configuration-Code := Install | Uninstall**" lists a category of rights for installing and uninstalling software on a repository (typically a rendering repository.) This would typically occur for the installation of a new type of player within the rendering repository.

- **Install:** To install new software on a repository.
- **Uninstall:** To remove existing software from a repository.

Grammar element 1509 "**Next-Set-of-Rights := {(Add: Set-Of-Rights)} {(Delete: Set-Of-Rights)} {(Replace: Set-Of-Rights)} {(Keep: Set-Of-Rights)}**" defines how rights are carried forward for a copy of a digital work. If the Next-Copy-Rights is not specified, the rights for the next copy are the same as those of the current copy. Otherwise, the set of rights for the next copy can be specified. Versions of rights after **Add:** are added to the current set of rights. Rights after **Delete:** are deleted from the current set of rights. If only right codes are listed after **Delete:**, then all versions of

rights with those codes are deleted. Versions of rights after Replace: subsume all versions of rights of the same type in the current set of rights.

If Remaining-Rights is not specified, then there are no rights for the original after all Loan copies are loaned out. If Remaining-Rights is specified, then the Keep: token can be used to simplify the expression of what rights to keep behind. A list of right codes following keep means that all of the versions of those listed rights are kept in the remaining copy. This specification can be overridden by subsequent Delete: or Replace: specifications.

Copy Count Specification

For various transactions, it may be desirable to provide some limit as to the number of "copies" of the work which may be exercised simultaneously for the right. For example, it may be desirable to limit the number of copies of a digital work that may be loaned out at a time or viewed at a time.

Grammar element 1510 "**Copy-Count := (Copies: positive-integer | 0 | unlimited)**" provides a condition which defines the number of "copies" of a work subject to the right. A copy count can be 0, a fixed number, or unlimited. The copy-count is associated with each right, as opposed to there being just a single copy-count for the digital work. The Copy-Count for a right is decremented each time that a right is exercised. When the Copy-Count equals zero, the right can no longer be exercised. If the Copy-Count is not specified, the default is one.

Contr l Specification

Rights and fees depend in general on rights granted by the creator as well as further restrictions imposed by later distributors. Control specifications deal with interactions between the creators and their distributors governing the imposition of further restrictions and fees. For example, a distributor of a digital work may not want an end consumer of a digital work to add fees or otherwise profit by commercially exploiting the purchased digital work.

Grammar element 1511 "Control-Spec := (Control: {Restrictable | Unrestrictable} {Unchargeable | Chargeable})" provides a condition to specify the effect of usage rights and fees of parents on the exercise of the right. A digital work is restrictable if higher level d-blocks can impose further restrictions (time specifications and access specifications) on the right. It is unrestrictable if no further restrictions can be imposed. The default setting is restrictable. A right is unchargeable if no more fees can be imposed on the use of the right. It is chargeable if more fees can be imposed. The default is chargeable.

Time Specification

It is often desirable to assign a start date or specify some duration as to when a right may be exercised. Grammar element 1512 "Time-Spec := ((Fixed-Interval | Sliding-Interval | Meter-Time) Until: Expiration-Date)" provides for specification of time conditions on the exercise of a right. Rights may be granted for a specified time. Different kinds of time specifications are appropriate for different kinds of rights. Some rights may

be exercised during a fixed and predetermined duration. Some rights may be exercised for an interval that starts the first time that the right is invoked by some transaction. Some rights may be exercised or are charged according to some kind of metered time, which may be split into separate intervals. For example, a right to view a picture for an hour might be split into six ten minute viewings or four fifteen minute viewings or twenty three minute viewings.

The terms "time" and "date" are used synonymously to refer to a moment in time. There are several kinds of time specifications. Each specification represents some limitation on the times over which the usage right applies. The Expiration-Date specifies the moment at which the usage right ends. For example, if the Expiration-Date is "Jan 1, 1995," then the right ends at the first moment of 1995. If the Expiration-Date is specified as *forever*, then the rights are interpreted as continuing without end. If only an expiration date is given, then the right can be exercised as often as desired until the expiration date.

Grammar element 1513 "Fixed-Interval := From: Start-Time" is used to define a predetermined interval that runs from the start time to the expiration date.

Grammar element 1514 "Sliding-Interval := Interval: Use-Duration" is used to define an indeterminate (or "open") start time. It sets limits on a continuous period of time over which the contents are accessible. The period starts on the first access and ends after the duration has passed or the expiration date is reached, whichever comes first. For example, if the

right gives 10 hours of continuous access, the use-duration would begin when the first access was made and end 10 hours later.

Grammar element 1515 "Meter-Time:= Time-Remaining: Remaining-Use" is used to define a "meter time," that is, a measure of the time that the right is actually exercised. It differs from the Sliding-Interval specification in that the time that the digital work is in use need not be continuous. For example, if the rights guarantee three days of access, those days could be spread out over a month. With this specification, the rights can be exercised until the meter time is exhausted or the expiration date is reached, whichever comes first.

Remaining-Use:= Time-Unit

Start-Time:=Time-Unit

Use-Duration:=Time-Unit

All of the time specifications include time-unit specifications in their ultimate instantiation.

Security Class and Authorization Specification

The present invention provides for various security mechanisms to be introduced into a distribution or use scheme. Grammar element 1516 "Access-Spec:= ((SC: Security-Class) {Authorization: Authorization-ID } {Other-Authorization: Authorization-ID*} {Ticket-ID})" provides a means for restricting access and transmission.

Access specifications can specify a required security class for a repository to exercise a right or a required authorization test that must be satisfied.

The keyword "SC:" is used to specify a minimum security level for the repositories involved in the access. If "SC:" is not specified, the lowest security level is acceptable.

The optional "Authorization:" keyword is used to specify required authorizations on the same repository as the work. The optional "Other-Authorization:" keyword is used to specify required authorizations on the other repository in the transaction.

The optional "Ticket:" keyword specifies the identity of a ticket required for the transaction. A transaction involving digital tickets must locate an appropriate digital ticket agent who can "punch" or otherwise validate the ticket before the transaction can proceed. Tickets are described in greater detail below.

In a transaction involving a repository and a document server, some usage rights may require that the repository have a particular authorization, that the server have some authorization, or that both repositories have (possibly different) authorizations. Authorizations themselves are digital works (hereinafter referred to as an authorization object) that can be moved between repositories in the same manner as other digital works. Their copying and transferring is subject to the same rights and fees as other digital works. A repository is said to have an authorization if that authorization object is contained within the repository.

In some cases, an authorization may be required from a source other than the document server and repository. An authorization object referenced by an Authorization-ID can contain digital address information to be used to set up a communications link between a repository and the authorization source. These are analogous to phone numbers. For such access tests, the communication would need to be established and authorization obtained before the right could be exercised.

For one-time usage rights, a variant on this scheme is to have a digital ticket. A ticket is presented to a digital ticket agent, whose type is specified on the ticket. In the simplest case, a certified generic ticket agent, available on all repositories, is available to "punch" the ticket. In other cases, the ticket may contain addressing information for locating a "special" ticket agent. Once a ticket has been punched, it cannot be used again for the same kind of transaction (unless it is unpunched or refreshed in the manner described below.) Punching includes marking the ticket with a timestamp of the date and time it was used. Tickets are digital works and can be copied or transferred between repositories according to their usage rights.

In the currently preferred embodiment, a "punched" ticket becomes "unpunched" or "refreshed" when it is copied or extracted. The Copy and Extract operations save the date and time as a property of the digital ticket. When a ticket agent is given a ticket, it can simply check whether the digital copy was made after the last time that it was punched. Of course, the digital ticket must have the copy or extract usage rights attached thereto.

The capability to unpunch a ticket is important in the following cases:

- A digital work is circulated at low cost with a limitation that it can be used only once.
- A digital work is circulated with a ticket that can be used once to give discounts on purchases of other works.
- A digital work is circulated with a ticket (included in the purchase price and possibly embedded in the work) that can be used for a future upgrade.

In each of these cases, if a paid copy is made of the digital work (including the ticket) the new owner would expect to get a fresh (unpunched) ticket, whether the copy seller has used the work or not. In contrast, loaning a work or simply transferring it to another repository should not revitalize the ticket.

Usage Fees and Incentives Specification

The billing for use of a digital work is fundamental to a commercial distribution system. Grammar Element 1517 "**Fee-Spec:= {Scheduled-Discunt} Regular-Fee-Spec | Scheduled-Fee-Spec | Markup-Spec**" provides a range of options for billing for the use of digital works.

A key feature of this approach is the development of low-overhead billing for transactions in potentially small amounts. Thus, it becomes feasible to collect fees of only a few cents each for thousands of transactions.

The grammar differentiates between uses where the charge is per use from those where it is metered by the time unit. Transactions can support fees that the user pays for using a digital work as well as incentives paid by the right grantor to users to induce them to use or distribute the digital work.

The optional scheduled discount refers to the rest of the fee specification-- discounting it by a percentage over time. If it is not specified, then there is no scheduled discount. Regular fee specifications are constant over time. Scheduled fee specifications give a schedule of dates over which the fee specifications change. Markup specifications are used in d-blocks for adding a percentage to the fees already being charged.

Grammar Element 1518 **"Scheduled-Discount:= (Scheduled-Discount: (Time-Spec Percentage)*"** A Scheduled-Discount is a essentially a scheduled modifier of any other fee specification for this version of the right of the digital work. (It does not refer to children or parent digital works or to other versions of rights.). It is a list of pairs of times and percentages. The most recent time in the list that has not yet passed at the time of the transaction is the one in effect. The percentage gives the discount percentage. For example, the number 10 refers to a 10% discount.

Grammar Element 1519 **"Regular-Fee-Spec := ({Fee: | Incentive: } [Per-Use-Spec | Metered-Rate-Spec | Best-Price-Spec | Call-For-Price-Spec] {Min: Money-Unit Per: Time-Spec}{Max: Money-Unit Per: Time-Spec} To: Account-ID)"** provides for several kinds of fee specifications.

Fees are paid by the copy-owner/user to the revenue-owner if **Fee:** is specified. Incentives are paid by the revenue-owner to the user if **Incentive:** is specified. If the **Min:** specification is given, then there is a minimum fee to be charged per time-spec unit for its use. If the **Max:** specification is given, then there is a maximum fee to be charged per time-spec for its use. When **Fee:** is specified, **Account-ID** identifies the account to which the fee is to be paid. When **Incentive:** is specified, **Account-ID** identifies the account from which the fee is to be paid.

Grammar element 1520 "**Per-Use-Spec := Per-Use: Money-unit**" defines a simple fee to be paid every time the right is exercised, regardless of how much time the transaction takes.

Grammar element 1521 "**Metered-Rate-Spec := Metered: Money-Unit Per: Time-Spec**" defines a metered-rate fee paid according to how long the right is exercised. Thus, the time it takes to complete the transaction determines the fee.

Grammar element 1522 "**Best-Price-Spec := Best-Price: Money-unit Max: Money-unit**" is used to specify a best-price that is determined when the account is settled. This specification is to accommodate special deals, rebates, and pricing that depends on information that is not available to the repository. All fee specifications can be combined with tickets or authorizations that could indicate that the consumer is a wholesaler or that he is a preferred customer, or that the seller be authorized in some way. The amount of money in the **Max:** field is the maximum amount that the user will

cost. This is the amount that is tentatively debited from the credit server. However, when the transaction is ultimately reconciled, any excess amount will be returned to the consumer in a separate transaction.

Grammar element 1523 **"Call-For-Price-Spec := Call-For-Price "** is similar to a **"Best-Price-Spec"** in that it is intended to accommodate cases where prices are dynamic. A **Call-For-Price Spec** requires a communication with a dealer to determine the price. This option cannot be exercised if the repository cannot communicate with a dealer at the time that the right is exercised. It is based on a secure transaction whereby the dealer names a price to exercise the right and passes along a deal certificate which is referenced or included in the billing process.

Grammar element 1524 **"Scheduled-Fee-Spec:= (Schedule: (Time-Spec Regular-Fee-Spec)*)"** is used to provide a schedule of dates over which the fee specifications change. The fee specification with the most recent date not in the future is the one that is in effect. This is similar to but more general than the scheduled discount. It is more general, because it provides a means to vary the fee agreement for each time period.

Grammar element 1525 **"Markup-Spec:= Markup: percentage To: Account-ID"** is provided for adding a percentage to the fees already being charged. For example, a 5% markup means that a fee of 5% of cumulative fee so far will be allocated to the distributor. A markup specification can be applied to all of the other kinds of fee specifications. It is typically used in a shell provided by a distributor. It refers to fees associated with d-blocks that

are parts of the current d-block. This might be a convenient specification for use in taxes, or in distributor overhead.

Examples of Sets of Usage Rights

- ((Play) (Transfer (SC: 3)) (Delete))

This work can be played without requirements for fee or authorization on any rendering system. It can be transferred to any other repository of security level 3 or greater. It can be deleted.

- ((Play) (Transfer (SC: 3)) (Delete) (Backup) (Restore (Fee:Per-Use: \$5 To: Account-ID-678)))

Same as the previous example plus rights for backup and restore. The work can be backed up without fee. It can be restored for a \$5 fee payable to the account described by Account-ID-678.

- ((Play) (Transfer (SC: 3))

(Copy (SC:3)(Fee: Per-Use: \$5 To: Account-ID-678))

(Delete (Incentive: Per-Use: \$2.50 To: Account-ID-678)))

This work can be played, transferred, copied, or deleted. Copy or transfer operations can take place only with repositories of security level three or greater. The fee to make a copy is \$5 payable to Account-ID-678. If a copy is deleted, then an incentive of \$2.50 is paid to the former copy owner.

- ((Play) (Transfer (SC: 3))

Copy (SC: 3) (Fee: Per-Use: \$10 To: Account-ID-678))

Delete) (Backup) (Restore (SC: 3) (Fee: Per-Use: \$5 To: Account-ID-678)))

Same as the previous example plus fees for copying. The work can be copied digitally for a fee of \$10 payable to Account-ID-678. The repository on which the work is copied or restored must be at security level 3 or greater.

- ((Play) (Transfer (SC: 3))

(Copy Authorization: License-123-ID (SC: 3)))

The digital work can be played, transferred, or copied. Copies or transfers must be on repositories of security level 3 or greater. Copying requires the license License-123-ID issued to the copying repository. None of the rights require fees.

- ((Play) (Print Printer: Printer-567-ID (Fee: Per-Use: \$1 To: Account-ID-678)))

This work can be played for free. It can be printed on any printer with the identifier Printer-567-ID for a fee of \$1 payable to the account described by Account-ID-678.

- ((Play Player: Player-876-ID) (From: 94/02/14 Until: 95/02/15) (Fee: Metered: \$0.01 Per: 0:1:0 Min: \$0.25 Per: 0/1/0 To: Account-ID-567))

This work can be played on any player holding the ID Player-876-ID. The time of this right is from February 14, 1994 until February 15, 1995. The fee for use is one cent per minute with a minimum of 25 cents in any day that it is used, payable to the account described by Account-ID-567.

- ((Play) (Transfer) (Delete)(Loan 2 (Delete: Transfer Loan)))

This work can be played, transferred, deleted, or loaned. Up to two copies can be loaned out at a time. The loaned copy has the same rights except that it cannot be transferred. When both copies are loaned out, no rights can be exercised on the original on the repository.

- ((Play) (Transfer) (Delete) (Backup) (Restore (SC:3))

(Loan 2 Remaining-Copy-Rights: (Delete: Play Transfer)

Next-Set-of-Rights: (Delete: Transfer Loan)))

Similar to previous example. Rights to Backup and Restore the work are added, where restoration requires a repository of at least security level three. When all copies of the work are loaned out, the remaining copy cannot be played or transferred.

- ((Play) (Transfer) (Copy) (Print) (Backup) (Restore (SC:3))

(Loan 1 Remaining-Copy-Rights: (Add: Play Print Backup)

Next-Set-of-Rights: (Delete: Transfer Loan)

(Fee: Metered: \$10 Per: 1:0:0 To: Account-ID-567))

(Loan 1 Remaining-Copy-Rights:

Add: ((Play Player: Player-876-ID) 2 (From: 94/02/14 Until: 95/02/15)

(Fee: Metered: \$0.01 Per: 0:1:0 Min: \$0.25 Per: 0/1/0

To: Account-ID-567))))

The original work has rights to Play, Transfer, Copy, Print, Backup, Restore, and Loan. There are two versions of the Loan right. The first version of the loan right costs \$10 per day but allows the original copy owner to exercise free use of the Play, Print and Backup rights. The second version of the Loan right is free. None of the original rights are applicable. However a right to Play the work at the specified metered rate is added.

● ((Play Player: Player-Small-Screen-123-ID)

(Embed (Fee: Per-Use \$.01 To: Account-678-ID))

(Copy (Fee: Per-Use \$1.00 To: Account-678-ID)))

The digital work can be played on any player with the identifier Player-Small-Screen-123-ID. It can be embedded in a larger work. The embedding requires a modest one cent registration fee to Account-678-ID. Digital copies can be made for \$1.00.

REPOSITORY TRANSACTIONS

When a user requests access to a digital work, the repository will initiate various transactions. The combination of transactions invoked will

depend on the specifications assigned for a usage right. There are three basic types of transactions, Session Initiation Transactions, Financial Transactions and Usage Transactions. Generally, session initiation transactions are initiated first to establish a valid session. When a valid session is established, transactions corresponding to the various usage rights are invoked. Finally, request specific transactions are performed.

Transactions occur between two repositories (one acting as a server), between a repository and a document playback platform (e.g. for executing or viewing), between a repository and a credit server or between a repository and an authorization server. When transactions occur between more than one repository, it is assumed that there is a reliable communication channel between the repositories. For example, this could be a TCP/IP channel or any other commercially available channel that has built-in capabilities for detecting and correcting transmission errors. However, it is not assumed that the communication channel is secure. Provisions for security and privacy are part of the requirements for specifying and implementing repositories and thus form the need for various transactions.

Message Transmission

Transactions require that there be some communication between repositories. Communication between repositories occurs in units termed as messages. Because the communication line is assumed to be unsecure, all communications with repositories that are above the lowest security class are encrypted utilizing a public key encryption technique. Public key encryption is a well known technique in the encryption arts. The term key

refers to a numeric code that is used with encryption and decryption algorithms. Keys come in pairs, where "writing keys" are used to encrypt data and "checking keys" are used to decrypt data. Both writing and checking keys may be public or private. Public keys are those that are distributed to others. Private keys are maintained in confidence.

Key management and security is instrumental in the success of a public key encryption system. In the currently preferred embodiment, one or more master repositories maintain the keys and create the identification certificates used by the repositories.

When a sending repository transmits a message to a receiving repository, the sending repository encrypts all of its data using the public writing key of the receiving repository. The sending repository includes its name, the name of the receiving repository, a session identifier such as a nonce (described below), and a message counter in each message.

In this way, the communication can only be read (to a high probability) by the receiving repository, which holds the private checking key for decryption. The auxiliary data is used to guard against various replay attacks to security. If messages ever arrive with the wrong counter or an old nonce, the repositories can assume that someone is interfering with communication and the transaction terminated.

The respective public keys for the repositories to be used for encryption are obtained in the registration transaction described below.

Session Initiation Transactions

A usage transaction is carried out in a session between repositories. For usage transactions involving more than one repository, or for financial transactions between a repository and a credit server, a registration transaction is performed. A second transaction termed a login transaction, may also be needed to initiate the session. The goal of the registration transaction is to establish a secure channel between two repositories who know each others identities. As it is assumed that the communication channel between the repositories is reliable but not secure, there is a risk that a non-repository may mimic the protocol in order to gain illegitimate access to a repository.

The registration transaction between two repositories is described with respect to Figures 16 and 17. The steps described are from the perspective of a "repository-1" registering its identity with a "repository-2". The registration must be symmetrical so the same set of steps will be repeated for repository-2 registering its identity with repository-1. Referring to Figure 16, repository-1 first generates an encrypted registration identifier, step 1601 and then generates a registration message, step 1602. A registration message is comprised of an identifier of a master repository, the identification certificate for the repository-1 and an encrypted random registration identifier. The identification certificate is encrypted by the master repository in its private key and attests to the fact that the repository (here repository-1) is a bona fide repository. The identification certificate also contains a public key for the repository, the repository security level and a timestamp (indicating a time after which the certificate is no longer

valid.) The registration identifier is a number generated by the repository for this registration. The registration identifier is unique to the session and is encrypted in repository-1's private key. The registration identifier is used to improve security of authentication by detecting certain kinds of communications based attacks. Repository-1 then transmits the registration message to repository-2, step 1603.

Upon receiving the registration message, repository-2 determines if it has the needed public key for the master repository, step 1604. If repository-2 does not have the needed public key to decrypt the identification certificate, the registration transaction terminates in an error, step 1618.

Assuming that repository-2 has the proper public key the identification certificate is decrypted, step 1605. Repository-2 saves the encrypted registration identifier, step 1606, and extracts the repository identifier, step 1607. The extracted repository identifier is checked against a "hotlist" of compromised document repositories, step 1608. In the currently preferred embodiment, each repository will contain "hotlists" of compromised repositories. If the repository is on the "hotlist", the registration transaction terminates in an error per step 1618. Repositories can be removed from the hotlist when their certificates expire, so that the list does not need to grow without bound. Also, by keeping a short list of hotlist certificates that it has previously received, a repository can avoid the work of actually going through the list. These lists would be encrypted by a master repository. A minor variation on the approach to improve efficiency would have the repositories first exchange lists of names of hotlist certificates, ultimately

exchanging only those lists that they had not previously received. The "hotlists" are maintained and distributed by Master repositories.

Note that rather than terminating in error, the transaction could request that another registration message be sent based on an identification certificate created by another master repository. This may be repeated until a satisfactory identification certificate is found, or it is determined that trust cannot be established.

Assuming that the repository is not on the hotlist, the repository identification needs to be verified. In other words, repository-2 needs to validate that the repository on the other end is really repository-1. This is termed performance testing and is performed in order to avoid invalid access to the repository via a counterfeit repository replaying a recording of a prior session initiation between repository-1 and repository-2. Performance testing is initiated by repository-2 generating a performance message, step 1609. The performance message consists of a nonce, the names of the respective repositories, the time and the registration identifier received from repository-1. A nonce is a generated message based on some random and variable information (e.g. the time or the temperature.) The nonce is used to check whether repository-1 can actually exhibit correct encrypting of a message using the private keys it claims to have, on a message that it has never seen before. The performance message is encrypted using the public key specified in the registration message of repository-1. The performance message is transmitted to repository-1, step 1610, where it is decrypted by repository-1 using its private key, step 1611. Repository-1 then checks to

make sure that the names of the two repositories are correct, step 1612, that the time is accurate, step 1613 and that the registration identifier corresponds to the one it sent, step 1614. If any of these tests fails, the transaction is terminated per step 1616. Assuming that the tests are passed, repository-1 transmits the nonce to repository-2 in the clear, step 1615. Repository-2 then compares the received nonce to the original nonce, step 1617. If they are not identical, the registration transaction terminates in an error per step 1618. If they are the same, the registration transaction has successfully completed.

At this point, assuming that the transaction has not terminated, the repositories exchange messages containing session keys to be used in all communications during the session and synchronize their clocks. Figure 17 illustrates the session information exchange and clock synchronization steps (again from the perspective of repository-1.) Referring to Figure 17, repository-1 creates a session key pair, step 1701. A first key is kept private and is used by repository-1 to encrypt messages. The second key is a public key used by repository-2 to decrypt messages. The second key is encrypted using the public key of repository-2, step 1702 and is sent to repository-2, step 1703. Upon receipt, repository-2 decrypts the second key, step 1704. The second key is used to decrypt messages in subsequent communications. When each repository has completed this step, they are both convinced that the other repository is bona fide and that they are communicating with the original. Each repository has given the other a key to be used in decrypting further communications during the session. Since that key is itself

transmitted in the public key of the receiving repository only it will be able to decrypt the key which is used to decrypt subsequent messages.

After the session information is exchanged, the repositories must synchronize their clocks. Clock synchronization is used by the repositories to establish an agreed upon time base for the financial records of their mutual transactions. Referring back to Figure 17, repository-2 initiates clock synchronization by generating a time stamp exchange message, step 1705, and transmits it to repository-1, step 1706. Upon receipt, repository-1 generates its own time stamp message, step 1707 and transmits it back to repository-2, step 1708. Repository-2 notes the current time, step 1709 and stores the time received from repository-1, step 1710. The current time is compared to the time received from repository-1, step 1711. The difference is then checked to see if it exceeds a predetermined tolerance (e.g. one minute), step 1712. If it does, repository-2 terminates the transaction as this may indicate tampering with the repository, step 1713. If not repository-2 computes an adjusted time delta, step 1714. The adjusted time delta is the difference between the clock time of repository-2 and the average of the times from repository-1 and repository-2.

To achieve greater accuracy, repository-2 can request the time again up to a fixed number of times (e.g. five times), repeat the clock synchronization steps, and average the results.

A second session initiation transaction is a Login transaction. The Login transaction is used to check the authenticity of a user requesting a transaction. A Login transaction is particularly prudent for the

authorization of financial transactions that will be charged to a credit server. The Login transaction involves an interaction between the user at a user interface and the credit server associated with a repository. The information exchanged here is a login string supplied by the repository/credit server to identify itself to the user, and a Personal Identification Number (PIN) provided by the user to identify himself to the credit server. In the event that the user is accessing a credit server on a repository different from the one on which the user interface resides, exchange of the information would be encrypted using the public and private keys of the respective repositories.

Billing Transactions

Billing Transactions are concerned with monetary transaction with a credit server. Billing Transaction are carried out when all other conditions are satisfied and a usage fee is required for granting the request. For the most part, billing transactions are well understood in the state of the art. These transactions are between a repository and a credit server, or between a credit server and a billing clearinghouse. Briefly, the required transactions include the following:

- Registration and LOGIN transactions by which the repository and user establish their bona fides to a credit server. These transactions would be entirely internal in cases where the repository and credit server are implemented as a single system.

- Registration and LOGIN transactions, by which a credit server establishes its bona fides to a billing clearinghouse.
- An Assign-fee transaction to assign a charge. The information in this transaction would include a transaction identifier, the identities of the repositories in the transaction, and a list of charges from the parts of the digital work. If there has been any unusual event in the transaction such as an interruption of communications, that information is included as well.
- An Begin-charges transaction to assign a charge. This transaction is much the same as an assign-fee transaction except that it is used for metered use. It includes the same information as the assign-fee transaction as well as the usage fee information. The credit-server is then responsible for running a clock.
- An End-charges transaction to end a charge for metered use. (In a variation on this approach, the repositories would exchange periodic charge information for each block of time.)
- A report-charges transaction between a personal credit server and a billing clearinghouse. This transaction is invoked at least once per billing period. It is used to pass along information about charges. On debit and credit cards, this transaction would also be used to update balance information and credit limits as needed.

All billing transactions are given a transaction ID and are reported to the credit servers by both the server and the client. This reduces possible loss of billing information if one of the parties to a transaction loses a banking card and provides a check against tampering with the system.

Usage Transactions

After the session initiation transactions have been completed, the usage request may then be processed. To simplify the description of the steps carried out in processing a usage request, the term requester is used to refer to a repository in the requester mode which is initiating a request, and the ~~term server~~ is used to refer to a repository in the server mode and which contains the desired digital work. In many cases such as requests to print or view a work, the requester and server may be the same device and the transactions described in the following would be entirely internal. In such instances, certain transaction steps, such as the registration transaction, need not be performed.

There are some common steps that are part of the semantics of all of the usage rights transactions. These steps are referred to as the common transaction steps. There are two sets -- the "opening" steps and the "closing" steps. For simplicity, these are listed here rather than repeating them in the descriptions of all of the usage rights transactions.

Transactions can refer to a part of a digital work, a complete digital work, or a Digital work containing other digital works. Although not described in detail herein, a transaction may even refer to a folder comprised

of a plurality of digital works. The term "work" is used to refer to what ever portion or set of digital works is being accessed.

Many of the steps here involve determining if certain conditions are satisfied. Recall that each usage right may have one or more conditions which must be satisfied before the right can be exercised. Digital works have parts and parts have parts. Different parts can have different rights and fees. Thus, it is necessary to verify that the requirements are met for ALL of the parts that are involved in a transaction. For brevity, when reference is made to checking whether the rights exist and conditions for exercising are satisfied, it is meant that all such checking takes place for each of the relevant parts of the work.

Figure 18 illustrates the initial common opening and closing steps for a transaction. At this point it is assumed that registration has occurred and that a "trusted" session is in place. General tests are tests on usage rights associated with the folder containing the work or some containing folder higher in the file system hierarchy. These tests correspond to requirements imposed on the work as a consequence of its being on the particular repository, as opposed to being attached to the work itself. Referring to Figure 18, prior to initiating a usage transaction, the requester performs any general tests that are required before the right associated with the transaction can be exercised, step, 1801. For example, install, uninstall and delete rights may be implemented to require that a requester have an authorization certificate before the right can be exercised. Another example is the requirement that a digital ticket be present and punched before a

digital work may be copied to a requester. If any of the general tests fail, the transaction is not initiated, step, 1802. Assuming that such required tests are passed, upon receiving the usage request, the server generates a transaction identifier that is used in records or reports of the transaction, step 1803. The server then checks whether the digital work has been granted the right corresponding to the requested transaction, step 1804. If the digital work has not been granted the right corresponding to the request, the transaction terminates, step 1805. If the digital work has been granted the requested right, the server then determines if the various conditions for exercising the right are satisfied. Time based conditions are examined, step 1806. These conditions are checked by examining the time specification for the the version of the right. If any of the conditions are not satisfied, the transaction terminates per step 1805.

Assuming that the time based conditions are satisfied, the server checks security and access conditions, step 1807. Such security and access conditions are satisfied if: 1) the requester is at the specified security class, or a higher security class, 2) the server satisfies any specified authorization test and 3) the requester satisfies any specified authorization tests and has any required digital tickets. If any of the conditions are not satisfied, the transaction terminates per step 1805.

Assuming that the security and access conditions are all satisfied, the server checks the copy count condition, step 1808. If the copy count equals zero, then the transaction cannot be completed and the transaction terminates per step 1805.

Assuming that the copy count does not equal zero, the server checks if the copies in use for the requested right is greater than or equal to any copy count for the requested right (or relevant parts), step 1809. If the copies in use is greater than or equal to the copy count, this indicates that usage rights for the version of the transaction have been exhausted. Accordingly, the server terminates the transaction, step 1805. If the copy count is less than the copies in use for the transaction the transaction can continue, and the copies in use would be incremented by the number of digital works requested in the transaction, step 1810.

The server then checks if the digital work has a "Loan" access right, step 1811. The "Loan" access right is a special case since remaining rights may be present even though all copies are loaned out. If the digital work has the "Loan" access right, a check is made to see if all copies have been loaned out, step 1812. The number of copies that could be loaned is the sum of the Copy-Counts for all of the versions of the loan right of the digital work. For a composite work, the relevant figure is the minimal such sum of each of the components of the composite work. If all copies have been loaned out, the remaining rights are determined, step 1813. The remaining-rights is determined from the remaining rights specifications from the versions of the Loan right. If there is only one version of the Loan right, then the determination is simple. The remaining rights are the ones specified in that version of the Loan right, or none if Remaining-Rights: is not specified. If there are multiple versions of the Loan right and all copies of all of the versions are loaned out, then the remaining rights is taken as the minimum

set (intersection) of remaining rights across all of the versions of the loan right. The server then determines if the requested right is in the set of remaining rights, step 1814. If the requested right is not in the set of remaining rights, the server terminates the transaction, step 1805.

If Loan is not a usage right for the digital work or if all copies have not been loaned out or the requested right is in the set of remaining rights, fee conditions for the right are then checked, step 1815. This will initiate various financial transactions between the repository and associated credit server. Further, any metering of usage of a digital work will commence. If any financial transaction fails, the transaction terminates per step 1805.

It should be noted that the order in which the conditions are checked need not follow the order of steps 1806-1815.

At this point, right specific steps are now performed and are represented here as step 1816. The right specific steps are described in greater detail below.

The common closing transaction steps are now performed. Each of the closing transaction steps are performed by the server after a successful completion of a transaction. Referring back to Figure 18, the copies in use value for the requested right is decremented by the number of copies involved in the transaction, step 1817. Next, if the right had a metered usage fee specification, the server subtracts the elapsed time from the Remaining-Use-Time associated with the right for every part involved in the transaction, step 1818. Finally, if there are fee specifications associated

with the right, the server initiates End-Charge financial transaction to confirm billing, step 1819.

Transmission Protocol

An important area to consider is the transmission of the digital work from the server to the requester. The transmission protocol described herein refers to events occurring after a valid session has been created. The transmission protocol must handle the case of disruption in the communications between the repositories. It is assumed that interference such as injecting noise on the communication channel can be detected by the integrity checks (e.g., parity, checksum, etc.) that are built into the transport protocol and are not discussed in detail herein.

The underlying goal in the transmission protocol is to preclude certain failure modes, such as malicious or accidental interference on the communications channel. Suppose, for example, that a user pulls a card with the credit server at a specific time near the end of a transaction. There should not be a vulnerable time at which "pulling the card" causes the repositories to fail to correctly account for the number of copies of the work that have been created. Restated, there should be no time at which a party can break a connection as a means to avoid payment after using a digital work.

If a transaction is interrupted (and fails), both repositories restore the digital works and accounts to their state prior to the failure, modulo records of the failure itself.

Figure 19 is a state diagram showing steps in the process of transmitting information during a transaction. Each box represents a state of a repository in either the server mode (above the central dotted line 1901) or in the requester mode (below the dotted line 1901). Solid arrows stand for transitions between states. Dashed arrows stand for message communications between the repositories. A dashed message arrow pointing to a solid transition arrow is interpreted as meaning that the transition takes place when the message is received. Unlabeled transition arrows take place unconditionally. Other labels on state transition arrows describe conditions that trigger the transition.

Referring now to Figure 19, the server is initially in a state 1902 where a new transaction is initiated via start message 1903. This message includes transaction information including a transaction identifier and a count of the blocks of data to be transferred. The requester, initially in a wait state 1904 then enters a data wait state 1905.

The server enters a data transmit state 1906 and transmits a block of data 1907 and then enters a wait for acknowledgement state 1908. As the data is received, the requesters enters a data receive state 1909 and when the data blocks is completely received it enters an acknowledgement state 1910 and transmits an Acknowledgement message 1911 to the server.

If there are more blocks to send, the server waits until receiving an Acknowledgement message from the requester. When an Acknowledgement message is received it sends the next block to the

requester and again waits for acknowledgement. The requester also repeats the same cycle of states.

If the server detects a communications failure before sending the last block, it enters a cancellation state 1912 wherein the transaction is cancelled. Similarly, if the requester detects a communications failure before receiving the last block it enters a cancellation state 1913.

If there are no more blocks to send, the server commits to the transaction and waits for the final Acknowledgement in state 1914. If there is a communications failure before the server receives the final Acknowledgement message, it still commits to the transaction but includes a report about the event to its credit server in state 1915. This report serves two purposes. It will help legitimize any claims by a user of having been billed for receiving digital works that were not completely received. Also it helps to identify repositories and communications lines that have suspicious patterns of use and interruption. The server then enters its completion state 1916

On the requester side, when there are no more blocks to receive, the requester commits to the transaction in state 1917. If the requester detects a communications failure at this state, it reports the failure to its credit server in state 1918, but still commits to the transaction. When it has committed, it sends an acknowledgement message to the server. The server then enters its completion state 1919

The key property is that both the server and the requester cancel a transaction if it is interrupted before all of the data blocks are delivered, and commits to it if all of the data blocks have been delivered.

There is a possibility that the server will have sent all of the data blocks (and committed) but the requester will not have received all of them and will cancel the transaction. In this case, both repositories will presumably detect a communications failure and report it to their credit server. This case will probably be rare since it depends on very precise timing of the communications failure. The only consequence will be that the user at the requester repository may want to request a refund from the credit services -- and the case for that refund will be documented by reports by both repositories.

To prevent loss of data, the server should not delete any transferred digital work until receiving the final acknowledgement from the requester. But it also should not use the file. A well known way to deal with this situation is called "two-phase commit" or 2PC.

Two-phase commit works as follows. The first phase works the same as the method described above. The server sends all of the data to the requester. Both repositories mark the transaction (and appropriate files) as uncommitted. The server sends a ready-to-commit message to the requester. The requester sends back an acknowledgement. The server then commits and sends the requester a commit message. When the requester receives the commit message, it commits the file.

If there is a communication failure or other crash, the requester must check back with the server to determine the status of the transaction. The server has the last word on this. The requester may have received all of the data, but if it did not get the final message, it has not committed. The server can go ahead and delete files (except for transaction records) once it commits, since the files are known to have been fully transmitted before starting the 2PC cycle.

There are variations known in the art which can be used to achieve the same effect. For example, the server could use an additional level of encryption when transmitting a work to a client. Only after the client sends a message acknowledging receipt does it send the key. The client then agrees to pay for the digital work. The point of this variation is that it provides a clear audit trail that the client received the work. For trusted systems, however, this variation adds a level of encryption for no real gain in accountability.

The transaction for specific usage rights are now discussed.

The Copy Transaction

A Copy transaction is a request to make one or more independent copies of the work with the same or lesser usage rights. Copy differs from the extraction right discussed later in that it refers to entire digital works or entire folders containing digital works. A copy operation cannot be used to remove a portion of a digital work.

- The requester sends the server a message to initiate the Copy Transaction. This message indicates the work to be copied, the version of the copy right to be used for the transaction, the destination address information (location in a folder) for placing the work, the file data for the work (including its size), and the number of copies requested.
- The repositories perform the common opening transaction steps.
- The server transmits the requested contents and data to the client according to the transmission protocol. If a Next-Set-Of-Rights has been provided in the version of the right, those rights are transmitted as the rights for the work. Otherwise, the rights of the original are transmitted. In any event, the Copy-Count field for the copy of the digital work being sent right is set to the number-of-copies requested.
- The requester records the work contents, data, and usage rights and stores the work. It records the date and time that the copy was made in the properties of the digital work.
- The repositories perform the common closing transaction steps.

The Transfer Transaction

A Transfer transaction is a request to move copies of the work with the same or lesser usage rights to another repository. In contrast with a copy transaction, this results in removing the work copies from the server.

- The requester sends the server a message to initiate the Transfer Transaction. This message indicates the work to be transferred, the version of the transfer right to be used in the transaction, the destination address information for placing the work, the file data for the work, and the number of copies involved.
- The repositories perform the common opening transaction steps.
- The server transmits the requested contents and data to the requester according to the transmission protocol. If a Next-Set-Of-Rights has been provided, those rights are transmitted as the rights for the work. Otherwise, the rights of the original are transmitted. In either case, the Copy-Count field for the transmitted rights are set to the number-of-copies requested.
- The requester records the work contents, data, and usage rights and stores the work.
- The server decrements its copy count by the number of copies involved in the transaction.
- The repositories perform the common closing transaction steps.
- If the number of copies remaining in the server is now zero, it erases the digital work from its memory.

Th L an Transacti n

A loan transaction is a mechanism for loaning copies of a digital work. The maximum duration of the loan is determined by an internal parameter of the digital work. Works are automatically returned after a predetermined time period.

- The requester sends the server a message to initiate the Transfer Transaction. This message indicates the work to be loaned, the version of the loan right to be used in the transaction, the destination address information for placing the work, the number of copies involved, the file data for the work, and the period of the loan.
- The server checks the validity of the requested loan period, and ends with an error if the period is not valid. Loans for a loaned copy cannot extend beyond the period of the original loan to the server.
- The repositories perform the common opening transaction steps.
- The server transmits the requested contents and data to the requester. If a Next-Set-Of-Rights has been provided, those rights are transmitted as the rights for the work. Otherwise, the rights of the original are transmitted, as modified to reflect the loan period.
- The requester records the digital work contents, data, usage rights, and loan period and stores the work.
- The server updates the usage rights information in the digital work to reflect the number of copies loaned out.

- The repositories perform the common closing transaction steps.
- The server updates the usage rights data for the digital work. This may preclude use of the work until it is returned from the loan. The user on the requester platform can now use the transferred copies of the digital work. A user accessing the original repository cannot use the digital work, unless there are copies remaining. What happens next depends on the order of events in time.

Case 1. If the time of the loan period is not yet exhausted and the requester sends the repository a Return message.

-
- The return message includes the requester identification, and the transaction ID.
 - The server decrements the copies-in-use field by the number of copies that were returned. (If the number of digital works returned is greater than the number actually borrowed, this is treated as an error.) This step may now make the work available at the server for other users.
 - The requester deactivates its copies and removes the contents from its memory.

Case 2. If the time of the loan period is exhausted and the requester has not yet sent a Return message.

- The server decrements the copies-in-use field by the number digital works that were borrowed.
- The requester automatically deactivates its copies of the digital work. It terminates all current uses and erases the digital work copies from memory. One question is why a requester would ever return a work earlier than the period of the loan, since it would be returned automatically anyway. One reason for early return is that there may be a metered fee which determines the cost of the loan. Returning early may reduce that fee.

The Play Transaction

A play transaction is a request to use the contents of a work. Typically, to "play" a work is to send the digital work through some kind of transducer, such as a speaker or a display device. The request implies the intention that the contents will not be communicated digitally to any other system. For example, they will not be sent to a printer, recorded on any digital medium, retained after the transaction or sent to another repository.

This term "play" is natural for examples like playing music, playing a movie, or playing a video game. The general form of play means that a "player" is used to use the digital work. However, the term play covers all media and kinds of recordings. Thus one would "play" a digital work, meaning, to render it for reading, or play a computer program, meaning to execute it. For a digital ticket the player would be a digital ticket agent.

- The requester sends the server a message to initiate the play transaction. This message indicates the work to be played, the version of the play right to be used in the transaction, the identity of the player being used, and the file data for the work.
- The server checks the validity of the player identification and the compatibility of the player identification with the player specification in the right. It ends with an error if these are not satisfactory.
- The repositories perform the common opening transaction steps.
- The server and requester read and write the blocks of data as requested by the player according to the transmission protocol. The requester plays the work contents, using the player.
- When the player is finished, the player and the requester remove the contents from their memory.
- The repositories perform the common closing transaction steps.

The Print Transaction

A Print transaction is a request to obtain the contents of a work for the purpose of rendering them on a "printer." We use the term "printer" to include the common case of writing with ink on paper. However, the key aspect of "printing" in our use of the term is that it makes a copy of the digital work in a place outside of the protection of usage rights. As with all rights, this may require particular authorization certificates.

Once a digital work is printed, the publisher and user are bound by whatever copyright laws are in effect. However, printing moves the contents outside the control of repositories. For example, absent any other enforcement mechanisms, once a digital work is printed on paper, it can be copied on ordinary photocopying machines without intervention by a repository to collect usage fees. If the printer to a digital disk is permitted, then that digital copy is outside of the control of usage rights. Both the creator and the user know this, although the creator does not necessarily give tacit consent to such copying, which may violate copyright laws.

- The requester sends the server a message to initiate a Print transaction. This message indicates the work to be played, the identity of the printer being used, the file data for the work, and the number of copies in the request.
- The server checks the validity of the printer identification and the compatibility of the printer identification with the printer specification in the right. It ends with an error if these are not satisfactory.
- The repositories perform the common opening transaction steps.
- The server transmits blocks of data according to the transmission protocol.
- The requester prints the work contents, using the printer.

When the printer is finished, the printer and the requester remove the contents from their memory.

- The repositories perform the common closing transaction steps.

The Backup Transaction

A Backup transaction is a request to make a backup copy of a digital work, as a protection against media failure. In the context of repositories, secure backup copies differ from other copies in three ways: (1) they are made under the control of a Backup transaction rather than a Copy transaction, (2) they do not count as regular copies, and (3) they are not usable as regular copies. Generally, backup copies are encrypted.

Although backup copies may be transferred or copied, depending on their assigned rights, the only way to make them useful for playing, printing or embedding is to restore them.

The output of a Backup operation is both an encrypted data file that contains the contents and description of a work, and a restoration file with an encryption key for restoring the encrypted contents. In many cases, the encrypted data file would have rights for "printing" it to a disk outside of the protection system, relying just on its encryption for security. Such files could be stored anywhere that was physically safe and convenient. The restoration file would be held in the repository. This file is necessary for the restoration of a backup copy. It may have rights for transfer between repositories.

- The requester sends the server a message to initiate a backup transaction. This message indicates the work to be backed up, the

version of the backup right to be used in the transaction, the destination address information for placing the backup copy, the file data for the work.

- The repositories perform the common opening transaction steps.
- The server transmits the requested contents and data to the requester. If a Next-Set-Of-Rights has been provided, those rights are transmitted as the rights for the work. Otherwise, a set of default rights for backup files of the original are transmitted by the server.
- The requester records the work contents, data, and usage rights. It then creates a one-time key and encrypts the contents file. It saves the key information in a restoration file.
- The repositories perform the common closing transaction steps.

In some cases, it is convenient to be able to archive the large, encrypted contents file to secure offline storage, such as a magneto-optical storage system or magnetic tape. This creation of a non-repository archive file is as secure as the encryption process. Such non-repository archive storage is considered a form of "printing" and is controlled by a print right with a specified "archive-printer." An archive-printer device is programmed to save the encrypted contents file (but not the description file) offline in such a way that it can be retrieved.

The Restore Transaction

A Restore transaction is a request to convert an encrypted backup copy of a digital work into a usable copy. A restore operation is intended to be used to compensate for catastrophic media failure. Like all usage rights, restoration rights can include fees and access tests including authorization checks.

- The requester sends the server a message to initiate a Restore transaction. This message indicates the work to be restored, the version of the restore right for the transaction, the destination address information for placing the work, and the file data for the work.
- The server verifies that the contents file is available (i.e. a digital work corresponding to the request has been backed-up.) If it is not, it ends the transaction with an error.
- The repositories perform the common opening transaction steps.
- The server retrieves the key from the restoration file. It decrypts the work contents, data, and usage rights.
- The server transmits the requested contents and data to the requester according to the transmission protocol. If a Next-Set-Of-Rights has been provided, those rights are transmitted as the rights for the work. Otherwise, a set of default rights for backup files of the original are transmitted by the server.

The requester stores the digital work.

- The repositories perform the common closing transaction steps.

The Delete Transaction

A Delete transaction deletes a digital work or a number of copies of a digital work from a repository. Practically all digital works would have delete rights.

- The requester sends the server a message to initiate a delete transaction. This message indicates the work to be deleted, the version of the delete right for the transaction.
- The repositories perform the common opening transaction steps.
- The server deletes the file, erasing it from the file system.
- The repositories perform the common closing transaction steps.

The Directory Transaction

A Directory transaction is a request for information about folders, digital works, and their parts. This amounts to roughly the same idea as protection codes in a conventional file system like TENEX, except that it is generalized to the full power of the access specifications of the usage rights language.

The Directory transaction has the important role of passing along descriptions of the rights and fees associated with a digital work. When a user wants to exercise a right, the user interface of his repository implicitly

makes a directory request to determine the versions of the right that are available. Typically these are presented to the user -- such as with different choices of billing for exercising a right. Thus, many directory transactions are invisible to the user and are exercised as part of the normal process of exercising all rights.

- The requester sends the server a message to initiate a Directory transaction. This message indicates the file or folder that is the root of the directory request and the version of the directory right used for the transaction.
- The server verifies that the information is accessible to the requester. In particular, it does not return the names of any files that have a HIDE-NAME status in their directory specifications, and it does not return the parts of any folders or files that have HIDE-PARTS in their specification. If the information is not accessible, the server ends the transaction with an error.
- The repositories perform the common opening transaction steps.
- The server sends the requested data to the requester according to the transmission protocol.
- The requester records the data.
- The repositories perform the common closing transaction steps.

The Folder Transacti n

A Folder transaction is a request to create or rename a folder, or to move a work between folders. Together with Directory rights, Folder rights control the degree to which organization of a repository can be accessed or modified from another repository.

- The requester sends the server a message to initiate a Folder transaction. This message indicates the folder that is the root of the folder request, the version of the folder right for the transaction, an operation, and data. The operation can be one of create, rename, and move file. The data are the specifications required for the operation, such as a specification of a folder or digital work and a name.
- The repositories perform the common opening transaction steps.
- The server performs the requested operation -- creating a folder, renaming a folder, or moving a work between folders.
- The repositories perform the common closing transaction steps.

The Extract Transaction

A extract transaction is a request to copy a part of a digital work and to create a new work containing it. The extraction operation differs from copying in that it can be used to separate a part of a digital work from d-blocks or shells that place additional restrictions or fees on it. The extraction operation differs from the edit operation in that it does not change the contents of a work, only its embedding in d-blocks. Extraction creates a new digital work.

- The requester sends the server a message to initiate an Extract transaction. This message indicates the part of the work to be extracted, the version of the extract right to be used in the transaction, the destination address information for placing the part as a new work, the file data for the work, and the number of copies involved.
- The repositories perform the common opening transaction steps.
- The server transmits the requested contents and data to the requester according to the transmission protocol. If a Next-Set-Of-Rights has been provided, those rights are transmitted as the rights for the new work. Otherwise, the rights of the original are transmitted. The Copy-Count field for this right is set to the number-of-copies requested.
- The requester records the contents, data, and usage rights and stores the work. It records the date and time that new work was made in the properties of the work.
- The repositories perform the common closing transaction steps.

The Embed Transaction

An embed transaction is a request to make a digital work become a part of another digital work or to add a shell d-block to enable the adding of fees by a distributor of the work..

The requester sends the server a message to initiate an Embed transaction. This message indicates the work to be embedded, the

version of the embed right to be used in the transaction, the destination address information for placing the part as a work, the file data for the work, and the number of copies involved.

- The server checks the control specifications for all of the rights in the part and the destination. If they are incompatible, the server ends the transaction with an error.
- The repositories perform the common opening transaction steps.
- The server transmits the requested contents and data to the requester according to the transmission protocol. If a Next-Set-Of-Rights has been provided, those rights are transmitted as the rights for the new work. Otherwise, the rights of the original are transmitted. The Copy-Count field for this right is set to the number-of-copies requested.
- The requester records the contents, data, and usage rights and embeds the work in the destination file.
- The repositories perform the common closing transaction steps.

The Edit Transaction

An Edit transaction is a request to make a new digital work by copying, selecting and modifying portions of an existing digital work. This operation can actually change the contents of a digital work. The kinds of changes that are permitted depend on the process being used. Like the extraction operation, edit operates on portions of a digital work. In contrast with the extract operation, edit does not effect the rights or location of the work. It

only changes the contents. The kinds of changes permitted are determined by the type specification of the processor specified in the rights. In the currently preferred embodiment, an edit transaction changes the work itself and does not make a new work. However, it would be a reasonable variation to cause a new copy of the work to be made.

- The requester sends the server a message to initiate an Edit transaction. This message indicates the work to be edited, the version of the edit right to be used in the transaction, the file data for the work (including its size), the process-ID for the process, and the number of copies involved.
- The server checks the compatibility of the process-ID to be used by the requester against any process-ID specification in the right. If they are incompatible, it ends the transaction with an error.
- The repositories perform the common opening transaction steps.
- The requester uses the process to change the contents of the digital work as desired. (For example, it can select and duplicate parts of it; combine it with other information; or compute functions based on the information. This can amount to editing text, music, or pictures or taking whatever other steps are useful in creating a derivative work.)
- The repositories perform the common closing transaction steps.

The edit transaction is used to cover a wide range of kinds of works. The category describes a process that takes as its input any portion of a digital

work and then modifies the input in some way. For example, for text, a process for editing the text would require edit rights. A process for "summarizing" or counting words in the text would also be considered editing. For a music file, processing could involve changing the pitch or tempo, or adding reverberations, or any other audio effect. For digital video works, anything which alters the image would require edit rights. Examples would be colorizing, scaling, extracting still photos, selecting and combining frames into story boards, sharpening with signal processing, and so on.

Some creators may want to protect the authenticity of their works by limiting the kinds of processes that can be performed on them. If there are no edit rights, then no processing is allowed at all. A processor identifier can be included to specify what kind of process is allowed. If no process identifier is specified, then arbitrary processors can be used. For an example of a specific process, a photographer may want to allow use of his photograph but may not want it to be colorized. A musician may want to allow extraction of portions of his work but not changing of the tonality.

Authorization Transactions

There are many ways that authorization transactions can be defined. In the following, our preferred way is to simply define them in terms of other transactions that we already need for repositories. Thus, it is convenient sometimes to speak of "authorization transactions," but they are actually made up of other transactions that repositories already have.

A usage right can specify an authorization-ID, which identifies an authorization object (a digital work in a file of a standard format) that the repository must have and which it must process. The authorization is given to the generic authorization (or ticket) server of the repository which begins to interpret the authorization.

As described earlier, the authorization contains a server identifier, which may just be the generic authorization server or it may be another server. When a remote authorization server is required, it must contain a digital address. It may also contain a digital certificate.

If a remote authorization server is required, then the authorization process first performs the following steps:

- The generic authorization server attempts to set up the communications channel. (If the channel cannot be set up, then authorization fails with an error.)
- When the channel is set up, it performs a registration process with the remote repository. (If registration fails, then the authorization fails with an error.)
- When registration is complete, the generic authorization server invokes a "Play" transaction with the remote repository, supplying the authorization document as the digital work to be played, and the remote authorization server (a program) as the "player." (If the

player cannot be found or has some other error, then the authorization fails with an error.)

- The authorization server then "plays" the authorization. This involves decrypting it using either the public key of the master repository that issued the certificate or the session key from the repository that transmitted it. The authorization server then performs various tests. These tests vary according to the authorization server. They include such steps as checking issue and validity dates of the authorization and checking any hot-lists of known invalid authorizations. The authorization server may require carrying out any other transactions on the repository as well, such as checking directories, getting some person to supply a password, or playing some other digital work. It may also invoke some special process for checking information about locations or recent events. The "script" for such steps is contained within the authorization server.
- If all of the required steps are completed satisfactorily, the authorization server completes the transaction normally, signaling that authorization is granted.

The Install Transaction

An Install transaction is a request to install a digital work as runnable software on a repository. In a typical case, the requester repository is a rendering repository and the software would be a new kind or new version of

a player. Also in a typical case, the software would be copied to file system of the requester repository before it is installed.

- The requester sends the server an Install message. This message indicates the work to be installed, the version of the Install right being invoked, and the file data for the work (including its size).
- The repositories perform the common opening transaction steps.
- The requester extracts a copy of the digital certificate for the software. If the certificate cannot be found or the master repository for the certificate is not known to the requester, the transaction ends with an error.
- The requester decrypts the digital certificate using the public key of the master repository, recording the identity of the supplier and creator, a key for decrypting the software, the compatibility information, and a tamper-checking code. (This step certifies the software.)
- The requester decrypts the software using the key from the certificate and computes a check code on it using a 1-way hash function. If the check-code does not match the tamper-checking code from the certificate, the installation transaction ends with an error. (This step assures that the contents of the software, including the various scripts, have not been tampered with.)

- The requester retrieves the instructions in the compatibility-checking script and follows them. If the software is not compatible with the repository, the installation transaction ends with an error. (This step checks platform compatibility.)
- The requester retrieves the instructions in the installation script and follows them. If there is an error in this process (such as insufficient resources), then the transaction ends with an error. Note that the installation process puts the runnable software in a place in the repository where it is no longer accessible as a work for exercising any usage rights other than the execution of the software as part of repository operations in carrying out other transactions.
- The repositories perform the common closing transaction steps.

The Uninstall Transaction

An Uninstall transaction is a request to remove software from a repository. Since uncontrolled or incorrect removal of software from a repository could compromise its behavioral integrity, this step is controlled.

- The requester sends the server an Uninstall message. This message indicates the work to be uninstalled, the version of the Uninstall right being invoked, and the file data for the work (including its size).
- The repositories perform the common opening transaction steps.

- The requester extracts a copy of the digital certificate for the software. If the certificate cannot be found or the master repository for the certificate is not known to the requester, the transaction ends with an error.
- The requester checks whether the software is installed. If the software is not installed, the transaction ends with an error.
- The requester decrypts the digital certificate using the public key of the master repository, recording the identity of the supplier and creator, a key for decrypting the software, the compatibility information, and a tamper-checking code. (This step authenticates the certification of the software, including the script for uninstalling it.)
- The requester decrypts the software using the key from the certificate and computes a check code on it using a 1-way hash function. If the check-code does not match the tamper-checking code from the certificate, the installation transaction ends with an error. (This step assures that the contents of the software, including the various scripts, have not been tampered with.)
- The requester retrieves the instructions in the uninstallation script and follows them. If there is an error in this process (such as insufficient resources), then the transaction ends with an error.

The repositories perform the common closing transaction steps.

DISTRIBUTION AND USE SCENARIOS

To appreciate the robustness and flexibility of the present invention, various distribution and use scenarios for digital works are illustrated below. These scenarios are meant to be exemplary rather than exhaustive.

Consumers as Unpaid Distributors

In this scenario, a creator distributes copies of his works to various consumers. Each consumer is a potential distributor of the work. If the consumer copies the digital work (usually for a third party), a fee is collected and automatically paid to the creator.

This scenario is a new twist for digital works. It depends on the idea that "manufacturing" is just copying and is essentially free. It also assumes that the consumers as distributors do not require a fee for their time and effort in distributing the work.

This scenario is performed as follows:

A creator creates a digital work. He grants a Copy right with fees paid back to himself. If he does not grant an Embed right, then consumers cannot use the mechanism to act as distributors to cause fees to be paid to themselves on future copies. Of course, they could negotiate side deals or trades to transfer money on their own, outside of the system.

Paid Distributors

In another scenario, every time a copy of a digital work is sold a fee is paid to the creator and also to the immediate distributor.

This scenario does not give special status to any particular distributor. Anyone who sells a document has the right to add a fee to the sale price. The fee for sale could be established by the consumer. It could also be a fixed nominal amount that is contributed to the account of some charity.

This scenario is performed as follows:

A creator creates a digital work. He grants a Copy right with fees to be paid back to himself. He grants an Embed right, so that anyone can add shells to have fees paid to themselves.

A distributor embeds the work in a shell, with fees specified to be paid back to himself. If the distributor is content to receive fees only for copies that he sells himself, he grants an Extract right on the shell.

When a consumer buys a copy from the distributor, fees are paid both to the distributor and to the creator. If he chooses, the consumer can extract the work from the distributor's shell. He cannot extract it from the creator's shell. He can add his own shell with fees to be paid to himself.

Licensed Distribution

- In this scenario, a creator wants to protect the reputation and value of his work by making certain requirements on its distributors. He issues licenses to distributors that satisfy th requirements, and in turn, promises

to reward their efforts by assuring that the work will not be distributed over competing channels. The distributors incur expenses for selecting the digital work, explaining it to buyers, promoting its sale, and possibly for the license itself. The distributor obtains the right to enclose the digital work in a shell, whose function is to permit the attachment of usage fees to be paid to the distributor in addition to the fees to be paid to the creator.

This differs from the previous scenario in that it precludes the typical copy owner from functioning as a distributor, since the consumer lacks a license to copy the document. Thus, a consumer cannot make copies, even for free. All copies must come initially from authorized distributors. This version makes it possible to hold distributors accountable in some way for the sales and support of the work, by controlling the distribution of certificates that enable distributors to legitimately charge fees and copy owners to make copies. Since licenses are themselves digital works, the same mechanisms give the creators control over distributors by charging for licenses and putting time limits on their validity.

This scenario is performed as follows:

A creator purchases a digital distribution license that he will hand out to his distributors. He puts access requirements (such as a personal license) on the Copy and Transfer rights on the distribution license so that only he can copy or transfer it.

The creator also creates a digital work. He grants an Embed right and a Copy right, both of which require the distribution license to be exercised. He

grants a Play right so that the work can be played by anyone. He may optionally add a Transfer or Loan right, so that end consumers can do some non-commercial exchange of the work among friends.

A distributor obtains the distribution license and a number of copies of the work. He makes copies for his customers, using his distribution license.

A customer buys and uses the work. He cannot make new copies because he lacks a distribution license.

Super Distributors

This is a variation on the previous scenarios. A distributor can sell to anyone and anyone can sell additional copies, resulting in fees being paid back to the creator. However, only licensed distributors can add fees to be paid to themselves.

This scenario gives distributors the right to add fees to cover their own advertising and promotional costs, without making them be the sole suppliers. Their customers can also make copies, thus broadening the channel without diminishing their revenues. This is because distributors collect fees from copies of any copies that they originally sold. Only distributors can add fees.

This scenario is performed similarly to the previous ones. There are two key differences. (1) The creator only grants Embed rights for people who have a Distribution license. This is done by putting a requirement for a distributor's license on the Embed right. Consequently, non-distributors

cannot add their own fees. (2) The Distributor does not grant Extract rights, so that consumers cannot avoid paying fees to the Distributor if they make subsequent copies. Consequently, all subsequent copies result in fees paid to the Distributor and the Creator.

1-Level Distribution Fees

In this scenario, a distributor gets a fee for any copy he sells directly. However, if one of his customers sells further copies, he gets no further fee for those copies.

This scenario pays a distributor only for use of copies that he actually sold.

This scenario is performed similarly to the previous ones. The key feature is that the distributor creates a shell which specifies fees to be paid to him. He puts Extract rights on the shell. When a consumer buys the work, he can extract away the distributor's shell. Copies made after that will not require fees to be paid to the distributor.

Distribution Trees

In another scenario, distributors sell to other distributors and fees are collected at each level. Every copy sold by any distributor -- even several d-blocks down in the chain -- results in a fee being paid back to all of the previous distributors.

This scenario is like a chain letter or value chain. Every contributor or distributor along the way obtains fees, and is thereby encouraged to promote the sale of copies of the digital work.

This scenario is performed similarly to the previous ones. The key feature is that the distributor creates a shell which specifies fees to be paid to him. He does not grant Extract rights on the shell. Consequently, all future copies that are made will result in fees paid to him.

Weighted Distribution Trees

In this scenario, distributors make money according to a distribution tree. The fee that they make depends on various parameters, such as time since their sale or the number of subsequent distributors.

This is a generalized version of the Distribution Tree scenario, in that it tries to vary the fee to account for the significance of the role of the distributor.

This scenario is similar to the previous one. The difference is that the fee specification on the distributor's shell has provisions for changes in prices. For example, there could be a fee schedule so that copies made after the passage of time will require lower fees to be paid to the distributor. Alternatively, the distributor could employ a "best-price" billing option, using any algorithm he chooses to determine the fee up to the maximum specified in the shell.

Fees for Reuse

In this scenario, a first creator creates a work. It is distributed by a first distributor and purchased by a second creator. The second creator extracts a portion of the work and embeds in it a new work distributed by a second distributor. A consumer buys the new work from the second distributor. The first creator receives fees from every transaction; the first distributor receives fees only for his sale; the second creator and second distributor receive fees for the final sale.

This scenario shows how that flexible automatic arrangements can be set up to create automatic charging systems that mirror current practice. This scenario is analogous to when an author pays a fee to reuse a figure in some paper. In the most common case, a fee is paid to the creator or publisher, but not to the bookstore that sold the book.

The mechanisms for derived works are the same as those for distribution.

Limited Reuse

In this scenario, several first creators create works. A second creator makes a selection of these, publishing a collection made up of the parts together with some new interstitial material. (For example, the digital work could be a selection of music or a selection of readings.) The second creator wants to continue to allow some of the selected works to be extractable, but not the interstitial material.

This scenario deals with fine grained control of the rights and fees for reuse.

This scenario is performed as follows:

The first creators create their original works. If they grant extraction and embedding rights, then the second creator can include them in a larger collected work. The second creator creates the interstitial material. He does grant an Extract right on the interstitial material. He grants Extract rights on a subset of the reused material. A consumer of the collection can only extract portions that have that right. Fees are automatically collected for all parts of the collection.

Commercial Libraries

Commercial libraries buy works with the right to loan. They limit the loan period and charge their own fees for use. This scenario deals with fees for loaning rather than fees for making copies. The fees are collected by the same automatic mechanisms.

The mechanisms are the same as previous scenarios except that the fees are associated with the Loan usage right rather than the Copy usage right.

Demo Versions

A creator believes that if people try his work that they will want to buy it or use it. Consumers of his work can copy the work for free, and play (or

execute) a limited version of the work for free, and can play or use the full featured version for a fee.

This scenario deals with fees for loaning rather than fees for making copies. The fees are collected by the same automatic mechanisms.

This scenario is performed as follows:

The creator creates a digital work and grants various rights and fees. The creator grants Copy and Embed rights without a fee, in order to ensure widespread distribution of the work. Another of the rights is a limited play right with little or no fee attached. For example, this right may be for playing only a portion of the work. The play right can have various restrictions on its use. It could have a ticket that limits the number of times it is used. It could have internal restrictions that limit its functionality. It could have time restrictions that invalidate the right after a period of time or a period of use. Different fees could be associated with other versions of the Play right.

Upgrading a Digital Work with a Vendor

A consumer buys a digital work together with an agreement that he can upgrade to a new version at a later date for a modest fee, much less than the usual purchase price. When the new version becomes available, he goes to a qualified vendor to make the transaction.

This scenario deals with a common situation in computer software. It shows how a purchase may include future "rights." Two important features

of the scenario are that the transaction must take place at a qualified vendor, and that the transaction can be done only once per copy of the digital work purchased.

This scenario is performed as follows:

The creator creates a digital work, an upgrade ticket, and a distribution license. The upgrade ticket uses the a generic ticket agent that comes with repositories. As usual, the distribution license does not have Copy or Transfer rights. He distributes a bundled copies of the work and the ticket to his distributors as well as distribution licenses.

The distributor sells the old bundled work and ticket to customers.

The customer extracts the work and the ticket. He uses the work according to the agreements until the new version becomes available.

When the new work is ready, the creator gives it to distributors. The new work has a free right to copy from a distributor if a ticket is available.

The consumer goes to distributors and arranges to copy the work. The transaction offers the ticket. The distributor's repository punches the ticket and copies the new version to the consumers repository.

The consumer can now use the new version of the work.

Distributed Upgrading of Digital Works

A consumer buys a digital work together with an agreement that he can upgrade to a new version at a later date for a modest fee, much less than the

usual purchase price. When the new version becomes available, he goes to anyone who has the upgraded version and makes the transaction.

This scenario is like the previous one in that the transaction can only be done once per copy of the digital work purchased, but the transaction can be accomplished without the need to connect to a licensed vendor.

This scenario is similar to the previous one except that the Copy right on the new work does not require a distribution license. The consumer can upgrade from any repository having the new version. He cannot upgrade more than once because the ticket cannot work after it has been punched. If desired, the repository can record the upgrade transaction by posting a zero cost bill to alert the creator that the upgrade has taken place.

Limited Printing

A consumer buys a digital work and wants to make a few ephemeral copies. For example, he may want to print out a paper copy of part of a digital newspaper, or he may want to make a (first generation) analog cassette tape for playing in his car. He buys the digital work together with a ticket required for printing rights.

This scenario is like the common practice of people making cassette tapes to play in their car. If a publisher permits the making of cassette tapes, there is nothing to prevent a consumer from further copying the tapes. However, since the tapes are "analog copies," there is a noticeable quality loss with subsequent generations. The new contribution of the present

invention is the use of tickets in the access controls for the making of the analog copies.

This scenario is performed as follows:

The creator sells a work together with limited printing rights. The printing rights specify the kind of printer (e.g., a kind of cassette recorder or a kind of desktop paper printer) and also the kind of ticket required. The creator either bundles a limited number of tickets or sells them separately. If the tickets use the generic ticket agent, the consumer with the tickets can exercise the right at his convenience.

Demand Publishing

Professors in a business school want to put together course books of readings selected from scenario studies from various sources. The bookstore wants to be able to print the books from digital masters, without negotiating for and waiting for approval of printing of each of the scenarios. The copyright holders of the scenarios want to be sure that they are paid for every copy of their work that is printed.

On many college campuses, the hassle of obtaining copy clearances in a timely way has greatly reduced the viability of preparing course books. Print shops have become much more cautious about copying works in the absence of documented permission.

Demand Publishing is performed as follows: the creator sells a work together with printing rights for a fee. There can be rights to copy

(distribute) the work between bookstore repositories, with or without fee. The printing rights specify the kind of printer. Whenever a bookstore prints one of the works (either standalone or embedded in a collection), the fee is credited to the creator automatically. To discourage unauthorized copying of the print outs, it would be possible for the printer to print tracer messages discretely on the pages identifying the printing transaction, the copy number, and any other identifying information. The tracer information could be secretly embedded in the text itself (encoded in the grey scale) or hidden in some other way.

Metered Use and Multiple Price Packages

A consumer does not know what music to purchase until he decides whether he likes it. He would like to be able to take it home and listen to it, and then decide whether to purchase. Furthermore, he would like the flexibility of paying less if he listens to it very infrequently.

This scenario just uses the capability of the approach to have multiple versions of a right on a digital work. Each version of the right has its own billing scheme. In this scenario, the creator of the work can offer the Copy right without fee, and defer billing to the exercise of the Play right. One version of the play right would allow a limited performance without fee -- a right to "demo". Another version of the right could have a metered rate, of say \$.25 per hour of play. Another version could have a fee of \$15.00 for the first play, but no fee for further playing. When the consumer exercises a play right, he specifies which version of the right is being selected and is billed accordingly.

Fees for Font Usage

A designer of type fonts invests several months in the design of special fonts. The most common way of obtaining revenue for this work is to sell copies of the fonts to publishers for unlimited use over unlimited periods of time. A font designer would like to charge a rate that reflects the amount that the font is used.

This scenario is performed as follows: the font designer creates a font as a digital work. He creates versions of the Play right that bill either for metered use or "per-use". Each version of the play right would require that the player (a print layout program) be of an approved category. The font designer assigns appropriate fees to exercise the Copy right. When a publisher client wants to use a font, he includes it as input to a layout program, and is billed automatically for its use. In this way, a publisher who makes little use of a font pays less than one who uses it a lot.

Rational Database Usage Charges

Online information retrieval services typically charge for access in a way that most clients find unpredictable and uncorrelated to value or information use. The fee depends on which databases are open, dial-up connect time, how long the searches require, and which articles are printed out. There are no provisions for extracting articles or photographs, no method for paying to reuse information in new works, no distinction between having the terminal sit idly versus actively searching for data, no distinction between reading articles on the screen and doing nothing, and

higher rates per search when the centralized facility is busy and slow servicing other clients. Articles can not be offloaded to the client's machine for off-site search and printing. To offer such billing or the expanded services, the service company would need a secure way to account for and bill for how information is used.

This scenario is performed as follows:

The information service bundles its database as files in a repository. The information services company assigns different fees for different rights on the information files. For example, there could be a fee for copying a search database or a source file and a different fee for printing. These fees would be in addition to fees assigned by the original creator for the services. The fees for using information would be different for using them on the information service company's computers or the client's computers. This billing distinction would be controlled by having different versions of the rights, where the version for use on the service company's computer requires a digital certificate held locally. Fees for copying or printing files would be handled in the usual way, by assigning fees to exercising those rights. The distinction between searching and viewing information would be made by having different "players" for the different functions. This distinction would be maintained on the client's computers as well as the service computers. Articles could be extracted for reuse under the control of Extract and Embed rights. Thus, if a client extracts part of an article or photograph, and then sells copies of a new digital work incorporating it, fees could automatically be collected both by the information service and earlier creators and

distributors of the digital work. In this way, the information retrieval service could both offer a wider selection of services and billing that more accurately reflects the client's use of the information.

Print Spooling with Rights

In the simplest scenario, when a user wants to print a digital document he issues a print command to the user interface. If the document has the appropriate rights and the conditions are satisfied, the user agrees to the fee and the document is printed. In other cases, the printer may be on a remote repository and it is convenient to spool the printing to a later time. This leads to several issues. The user requesting the printing wants to be sure that he is not billed for the printing until the document is actually printed. Restated, if he is billed at the time the print job is spooled but the job is canceled before printing is done, he does not want to pay. Another issue is that when spooling is permitted, there are now two times at which rights, conditions and fees could be checked: the time at which a print job is spooled and the time at which a print is made. As with all usage rights, it is possible to have rights that expire and to have rights whose fee depends on various conditions. What is needed is a means to check rights and conditions at the time that printing is actually done.

This scenario is performed as follows: A printing repository is a repository with the usual repository characteristics plus the hardware and software to enable printing. Suppose that a user logs into a home repository and wants to spool print jobs for a digital work at a remote printing repository. The user interface for this could treat this as a request to "spool"

prints. Underneath this "spooling" request, however, are standard rights and requests. To support such requests, the creator of the work provides a Copy right, which can be used to copy the work to a printing repository. In the default case, this Copy right would have no fees associated for making the copy. However, the Next-Set-Of-Rights for the copy would only include the Print rights, with the usual fees for each variation of printing. This version of the Copy right could be called the "print spooling" version of the Copy right. The user's "spool request" is implemented as a Copy transaction to put a copy of the work on the printing repository, followed by Print transactions to create the prints of the work. In this way, the user is only billed for printing that is actually done. Furthermore, the rights, conditions and fees for printing the work are determined when the work is about to be printed.

Thus, a system for enforcing the usage rights of digital works is disclosed. While the embodiments disclosed herein are preferred, it will be appreciate from this teaching that various alternative, modifications, variations or improvements therein may be made by those skilled in the art, which are intended to be encompassed by the following claims.

APPENDIX A

GLOSSARY

AUTHORIZATION REPOSITORY:

A special type of repository which provides an authorization service. An authorization may be specified by a usage right. The authorization must be obtained before the right may be exercised.

BILLING CLEARINGHOUSE:

A financial institution or the like whose purpose is to reconcile billing information received from credit servers. The billing clearinghouse may generate bills to users or alternatively, credit and debit accounts involved in the commercial transactions.

BILLING TRANSACTIONS:

The protocol used by which a repository reports billing information to a credit server.

CLEARINGHOUSE TRANSACTIONS:

The protocol used between a credit server and a clearinghouse.

COMPOSITE DIGITAL WORK:

A digital work comprised of distinguishable parts. Each of the distinguishable parts is itself a digital work which have have usage rights attached.

CONTENT:

The digital information (i.e. raw bits) representing a digital work.

COPY OWNER:

A term which refers to the party who owns a digital work stored in a repository. In the typical case, this party has purchased various rights to the document for printing, viewing, transferring, or other specific uses.

CREATOR:

A term which refers to a party who produces a digital work.

CREDIT SERVER:

A device which collects and reports billing information for a repository. In many implementations, this could be built as part of a repository. It requires a means for periodically communicating with a billing clearinghouse.

DESCRIPTION TREE:

A structure which describes the location of content and the usage rights and usage fees for a digital work. A description tree is comprised of description blocks. Each description block corresponds to a digital work or to an interest (typically a revenue bearing interest) in a digital work.

DIGITAL WORK (WORK):

Any encapsulated digital information. Such digital information may represent music, a magazine or book, or a multimedia composition. Usage rights and fees are attached to the digital work.

DISTRIBUTOR:

A term which refers to a party who legitimately obtains a copy of a digital work and offers it for sale.

IDENTIFICATION (DIGITAL) CERTIFICATE:

A signed digital message that attests to the identity of the possessor. Typically, digital certificates are encrypted in the private key of a well-known master repository.

MASTER REPOSITORY:

A special type of repository which issues identification certificates and distributes lists of repositories whose integrity have been compromised and which should be denied access to digital works (referred to as repository "hotlists".)

PUBLIC KEY ENCRYPTION:

An encryption technique used for secure transmission of messages on a communication channel. Key pairs are used for the encryption and decryption of messages. Typically one key is referred to as the public key and the other is the private key. The keys are inverses of each other from the perspective of encryption. Restated, a digital work that is encrypted by one key in the pair can be decrypted only by the other.

REGISTRATION TRANSACTIONS:

The protocol used between repositories to establish a trusted session.

RENDERING REPOSITORY:

A special type of repository which is typically coupled to a rendering system. The rendering repository will typically be embodied within the secure boundaries of a rendering system.

RENDERING SYSTEM:

The combination of a rendering repository and a rendering device. Examples of a rendering systems include printing systems, display systems, general purpose computer systems, video systems or audio systems.

REPOSITORY:

Conceptually a set of functional specifications defining core functionality in the support of usage rights. A repository is a trusted system in that it maintains physical, communications and behavioral integrity.

REQUESTER MODE:

A mode of a repository where it is requesting access to a digital work.

REVENUE OWNERS:

A term which refers to the parties that maintain an interest in collecting fees for document use or who stand to lose revenue if illegitimate copies of the digital work are made.

SERVER MODE:

A mode of a repository where it is processing an incoming request to access a digital work.

SHELL DESCRIPTION BLOCK:

A special type of description block designating an interest in a digital work, but which does not add content. This will typically be added by a distributor of a digital work to add their fees.

TRANSACTIONS:

A term used to refer to the protocols by which repositories communicate.

USAGE FEES:

A fee charged to a requester for access to a digital work. Usage fees are specified within the usage rights language.

USAGE RIGHTS:

A language for defining the manner in which a digital work may be used or distributed, as well as any conditions on which use or distribution is premised.

USAGE TRANSACTIONS:

A set of protocols by which repositories communicate in the exercise of a usage rights. Each usage right has it's own transaction steps.

WHAT IS CLAIMED IS:

1. A method for controlling rendering of digital content comprising:
providing a computer architecture including a repository adapted to store digital content and usage rights information associated with the digital content, the usage rights specifying a manner by which the digital content can be rendered, said repository being adapted to receive requests for stored digital content from a requester and, transmit requested digital content and the associated usage rights information to the requester in response to the request.
providing a rights enforcement mechanism for enforcing rendering of the digital content in accordance with the usage rights information, whereby the requested digital content cannot be rendered by the requester in the absence of the rights enforcement architecture and whereby the rights enforcement mechanism enforces rendering of the requested digital content by the requester in accordance with the usage rights information.
2. The method according to claim 1, wherein the step of providing a computer architecture comprises providing a computer architecture to a first party and the step of providing a rights enforcement mechanism comprises providing a rights enforcement mechanism to a second party that is distinct from the first party.
3. The method according to claim 1, wherein the repository includes a storage medium for storing the usage rights information and the digital content.
4. The method according to claim 1, wherein the repository includes a first storage medium for storing the usage rights information and a second storage medium for storing the digital content.
5. The method according to claim 1, wherein the usage rights information includes conditions that must be satisfied in order to permit rendering of the digital content.
6. The method according to claim 1, wherein the usage rights information includes fee information.

7. The method according to claim 1, wherein the usage rights information specifies circumstances under which the digital content can be rendered.

8. A method for controlling the rendering of digital contents comprising:
storing digital content and usage rights information associated with the digital content in a repository, said usage rights information specifying a manner by which the digital content can be rendered;

receiving requests for stored digital content and, in response thereto, causing a requested digital content and the associated usage rights information to be transmitted to the requester over a communications medium; and

enforcing usage of the digital content in accordance with the usage rights information, whereby the requested digital content cannot be rendered by the requester in the absence of a rights enforcement architecture and whereby rendering of the requested digital content by the requester is only in accordance with the usage rights information.

9. The method according to claim 8, wherein said storing step comprises storing the usage rights information on the same storage medium as the digital content.

10. The method according to claim 8, wherein said storing step comprises storing the usage rights information on a storage medium separate from a storage medium on which the digital content is stored.

11. The method according to claim 8, wherein the usage rights information includes conditions that must be satisfied in order to permit rendering of the digital content.

12. The method according to claim 8, wherein the usage rights information includes fee information.

13. The method according to claim 8, wherein the usage rights information specifies circumstances under which the digital content can be rendered.

14. The method according to claim 11, wherein the conditions include a fee to be collected in connection with the rendering of the digital content.

15. A computer-readable medium having stored thereon computer-executable instructions for controlling rendering of digital content, the instructions comprising:

instructions for storing encrypted digital content in a repository;

instructions for associating with the digital content usage rights information specifying a manner by which the digital content can be rendered;

instructions for receiving a request from a requester for the digital content; and

instructions for causing the requested digital content and the usage rights information to be transmitted from the repository to the requester in response to the request for the digital content.

16. The computer readable medium of claim 15, further comprising instructions for enforcing rendering of the digital content in accordance with the usage rights information, whereby the requested digital content cannot be rendered by the requester in the absence of a rights enforcement architecture and whereby rendering of the requested digital content by the requester is only in accordance with the usage rights information.

17. The computer-readable medium of claim 15, wherein the usage rights information specifies a condition that must be satisfied in order for the requester to render the digital content.

18. The computer-readable medium of claim 17, wherein the condition includes a fee to be collected in connection with the rendering of the digital content.

19. A method of rendering digital content having usage rights information associated therewith, the usage rights information specifying a manner by which the digital content can be rendered, the method comprising:

receiving a request to render the digital content;

determining, based on the usage rights information, whether the content can be rendered in accordance with the request; and

rendering the digital content in accordance with the request only if it is determined that the content can be rendered in accordance with the request.

20. The method of claim 19, wherein the usage rights information is stored on the same storage medium as the digital content.

21. The method of claim 19, wherein the usage rights information is stored on a storage medium that is separate from a storage medium on which the digital content is stored.

22. The method of claim 19, further comprising:
determining based on the usage rights information a fee to be collected in connection with rendering the digital content; and
collecting the fee prior to said rendering step.

23. The method of claim 22, wherein said step of collecting the fee comprises creating a debit against a user account.

24. The method of claim 23, wherein said step of collecting the fee further comprises reporting the debit to a clearinghouse.

25. The method of claim 22, further comprising the step of obtaining credit information relating to a user from a credit agency prior to collecting the fee.

26. A method of rendering digital content having usage rights information associated therewith, the usage rights information indicating how the digital content can be rendered, the method comprising:

receiving a request to render the digital content;
determining, based on the usage rights information, whether the digital content can be rendered in accordance with the request; and
denying the request and preventing rendering of the digital content if it is determined that the digital content cannot be rendered in accordance with the request.

27. The method of claim 26, wherein the usage rights information is stored on the same storage medium as the digital content.

28. The method of claim 26, wherein the usage rights information is stored on a storage medium that is separate from a storage medium on which the digital content is stored.

29. The method of claim 26, further comprising:
determining based on the usage rights information a fee to be collected in connection with rendering the digital content; and
collecting the fee prior to said rendering step.

30. The method of claim 29, wherein said step of collecting comprises creating a debit against a user account.

31. The method of claim 29, wherein said step of collecting further comprises reporting the debit to a clearinghouse.

32. The method of claim 29, further comprising the step of obtaining credit information relating to the user from a credit agency prior to collecting the monetary value.

33. The method of claim 26, wherein the usage rights information specifies a fee to be collected as a condition to rendering the digital content, and wherein said denying step is based at least in part on non-payment of the monetary amount as determined in said determining step.

34. A computer-readable medium having stored thereon computer-executable instructions for rendering digital content having usage rights information associated therewith and specifying how the digital content can be rendered, the medium comprising:
instructions for receiving a request to render the digital content;
instructions for determining, based on the usage rights information, whether the digital content can be rendered in accordance with the request; and

instructions for denying the request if the usage rights information does not indicate that the digital content can be rendered in accordance with the request.

35. The computer-readable medium of claim 34, further comprising instructions for approving the request and rendering the digital content if the usage rights information indicates that the digital content can be rendered in accordance with the request.

36. The computer-readable medium of claim 35, further comprising:
instructions for determining, based on the usage rights information, a fee to be collected in connection with rendering the digital content; and
instructions for collecting the fee.

37. A system for controlling rendering of digital content having usage rights information associated therewith, said system comprising:
a rendering system which issues a request to render the digital content; and
a rights repository which receives the request to render the digital content, examines the usage rights information associated with the digital content, and grants or denies the request to render the digital content based on whether the rights information permits rendering of the digital content in accordance with the request.

38. The system of claim 37, wherein the usage rights information includes a condition and wherein the rights repository grants or denies the request based at least in part on whether the condition is satisfied.

39. The system of claim 38, wherein the condition comprises a requirement that a fee be collected prior to rendering the digital content, and wherein the rights repository ensures that payment has been collected prior to granting a request to render the digital content.

Abstract

A system for controlling the distribution and use of digital works using digital tickets. In the present invention, a "digital ticket" is used to entitle the ticket holder to exercise some usage right with respect to a digital work. Usage rights are used to define how a digital work may be used or distributed. Each usage right may specify a digital ticket which must be present before the right may be exercised. Digital works are stored in repositories which enforce a digital works usage rights. Each repository has a "generic ticket agent" which punches tickets. In some instances only the generic ticket agent is necessary. In other instances, punching by a "special ticket agent" residing on another repository may be needed.

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

Figure 1

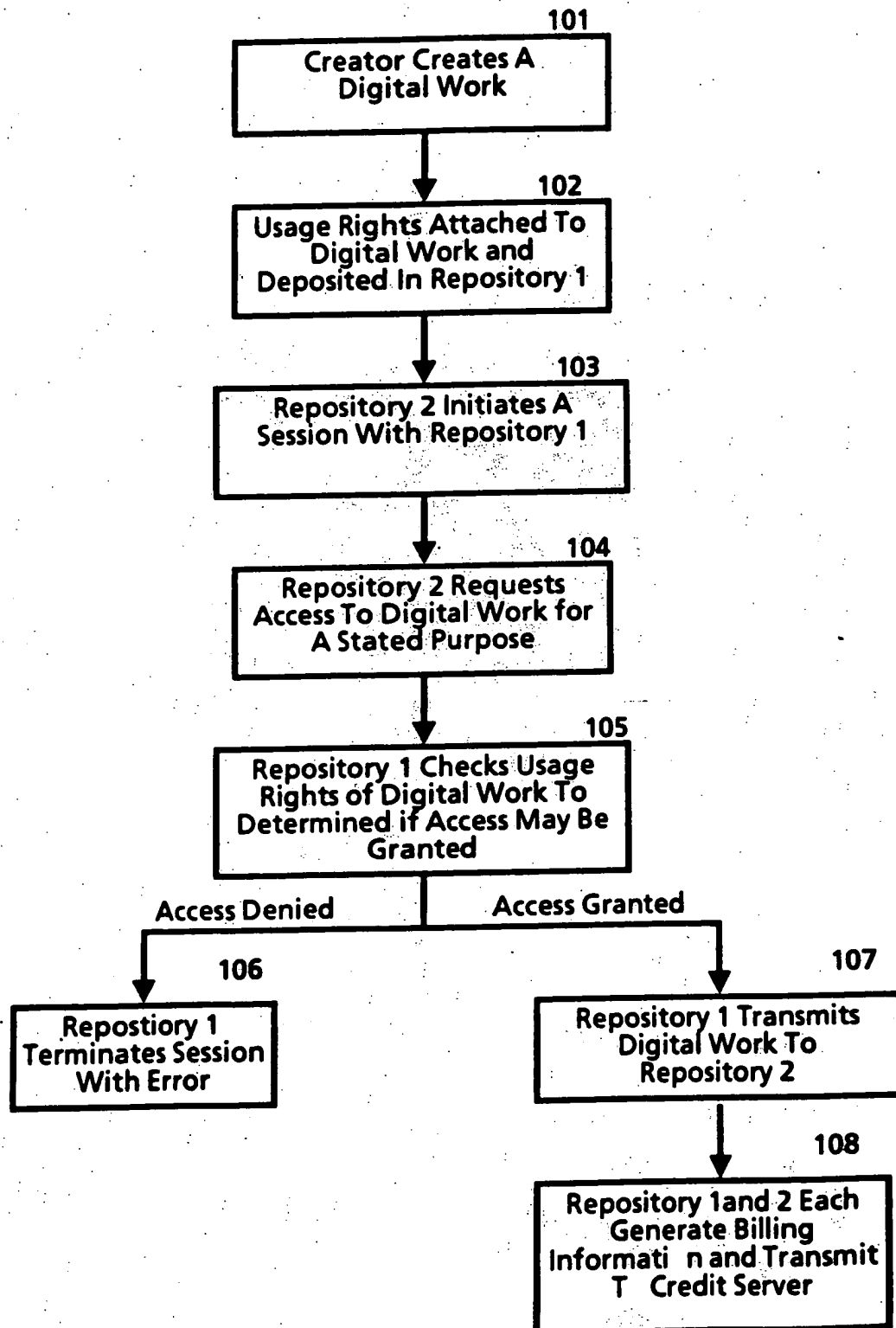


Figure 2

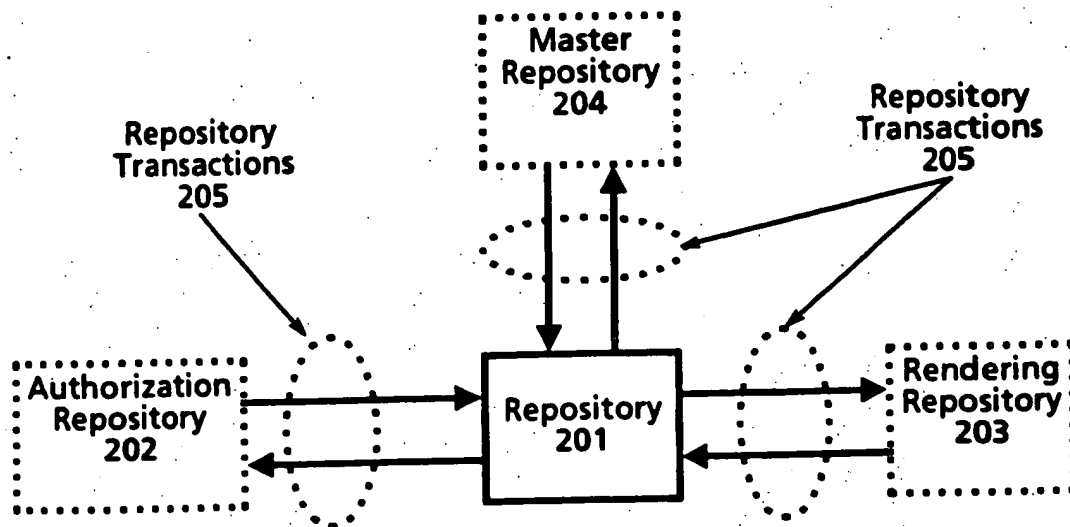


Figure 3

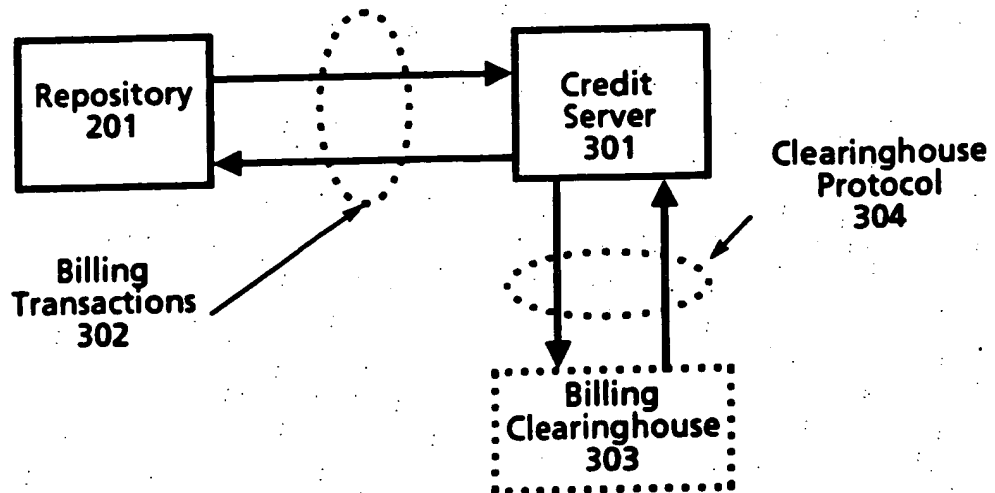


Figure 4a

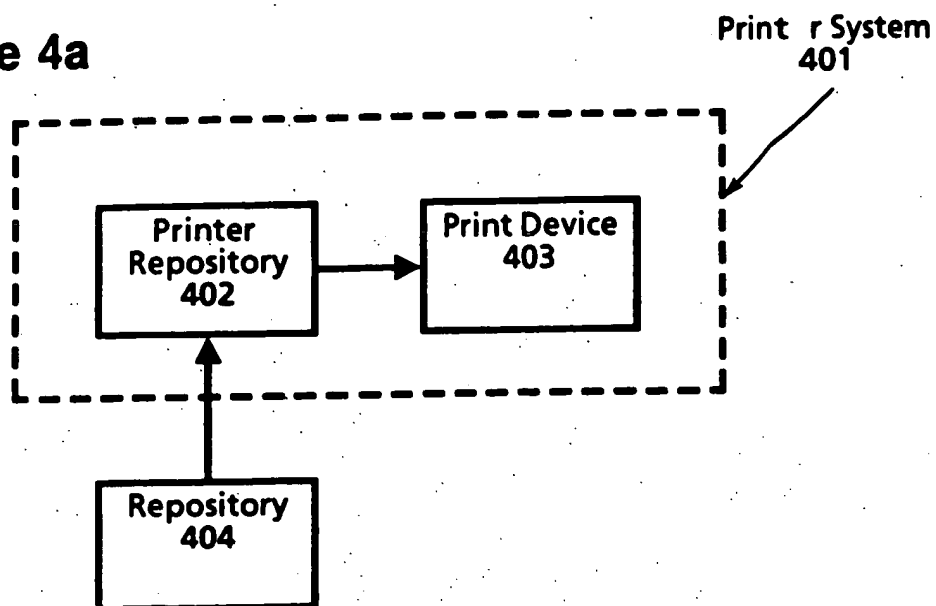
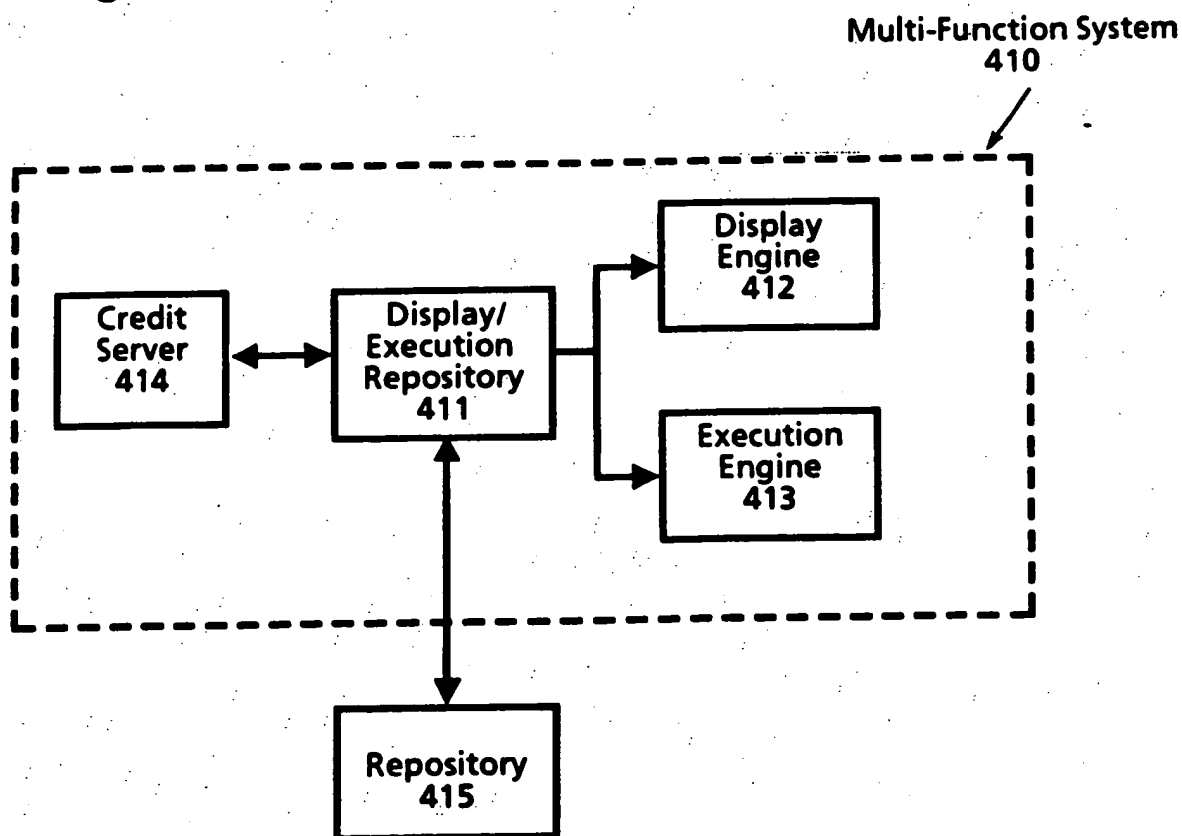


Figure 4b



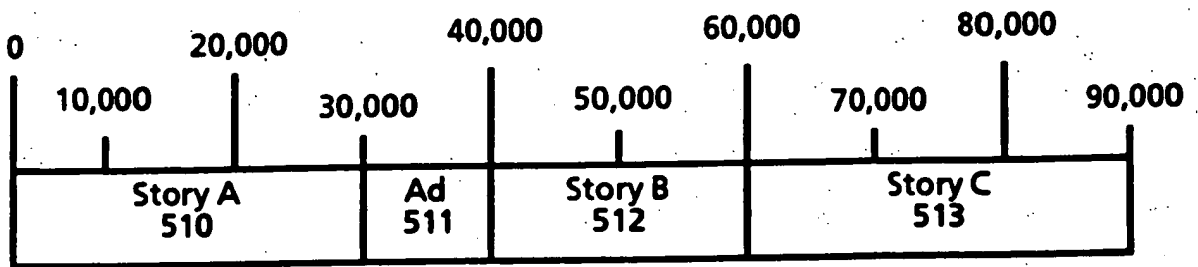


Figure 5

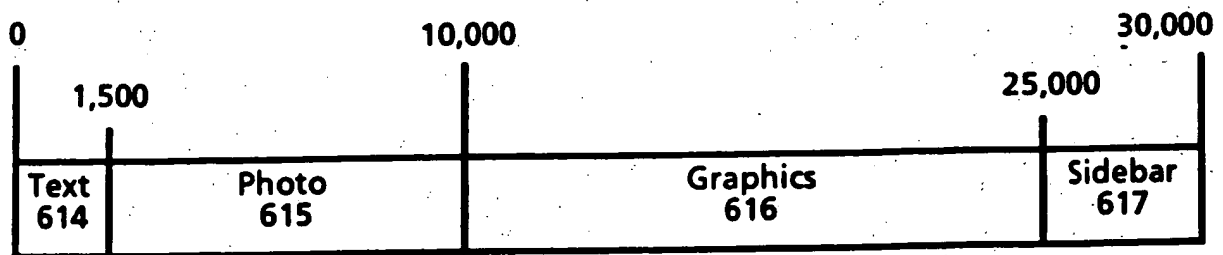


Figure 6

Figure 7

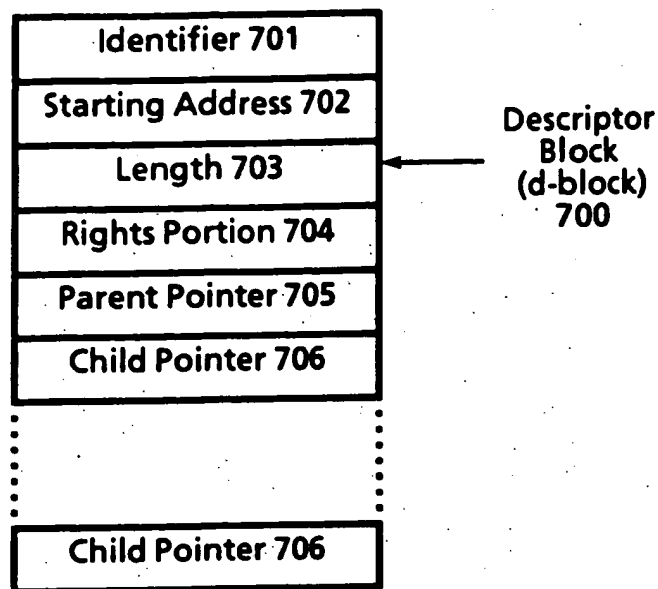


Figure 8

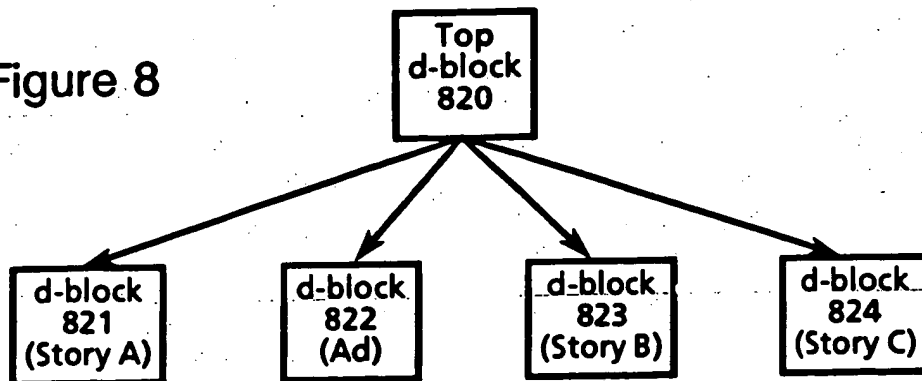
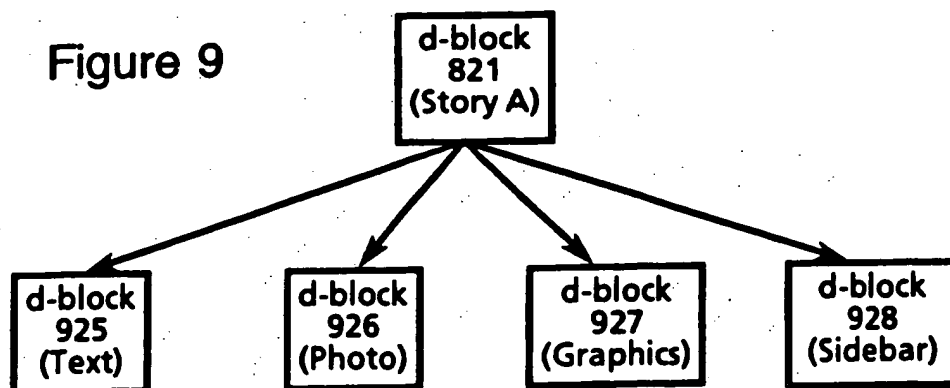


Figure 9



Figur 11

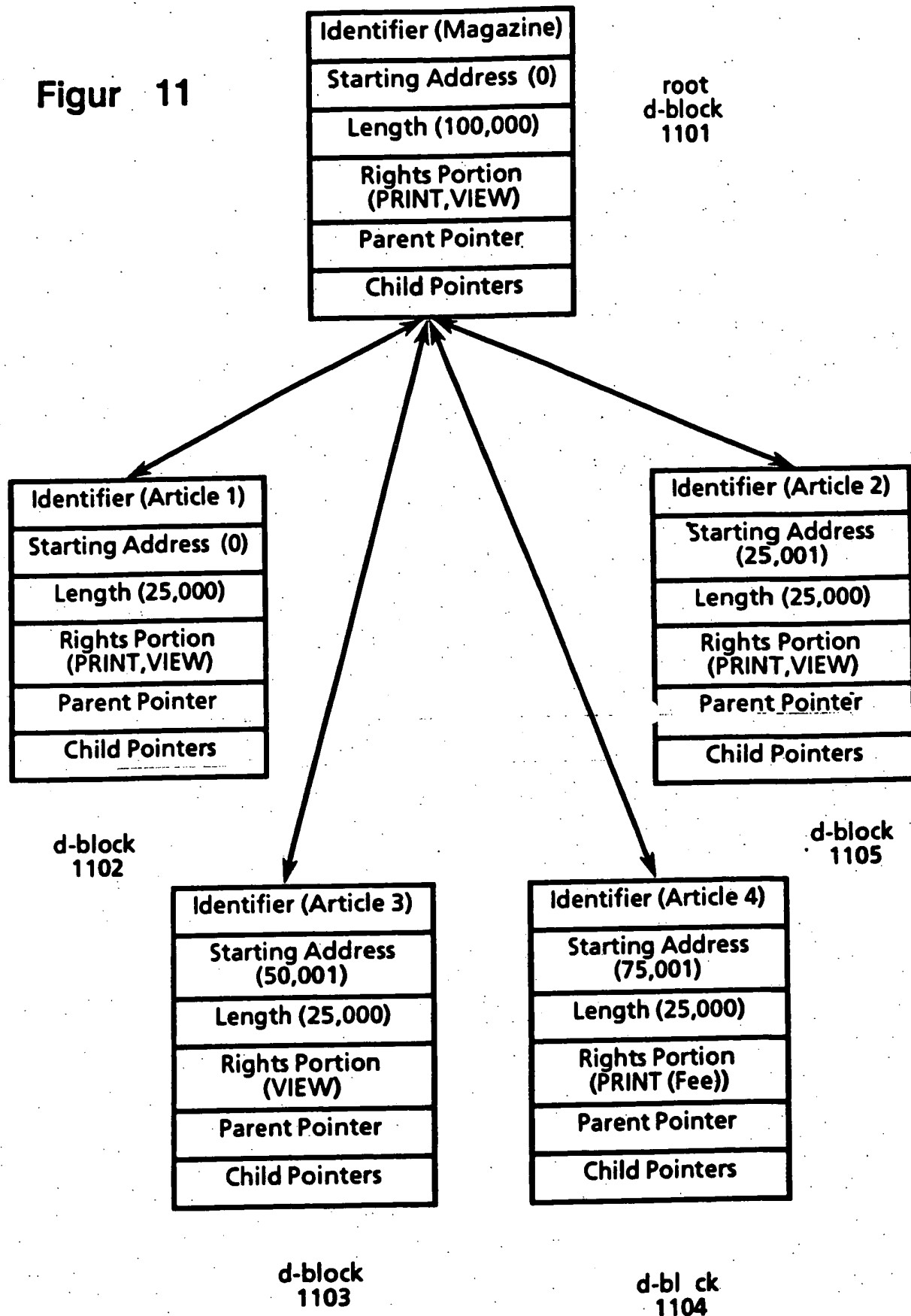


Figure 12

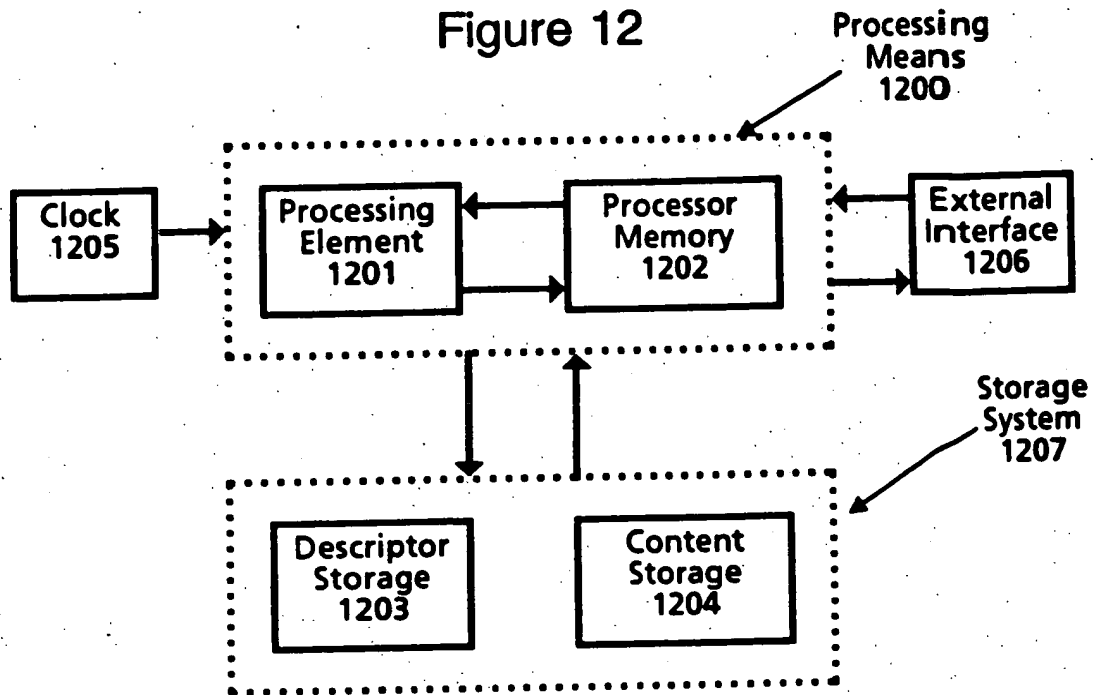


Figure 13

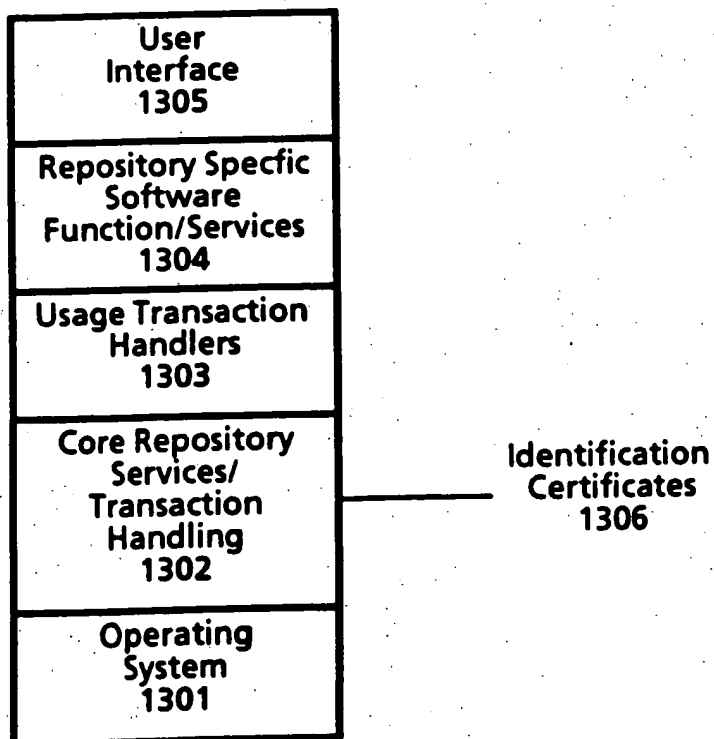


Figure 10

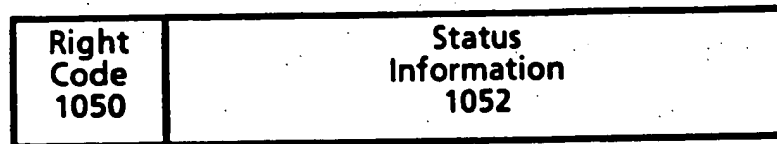


Figure 14

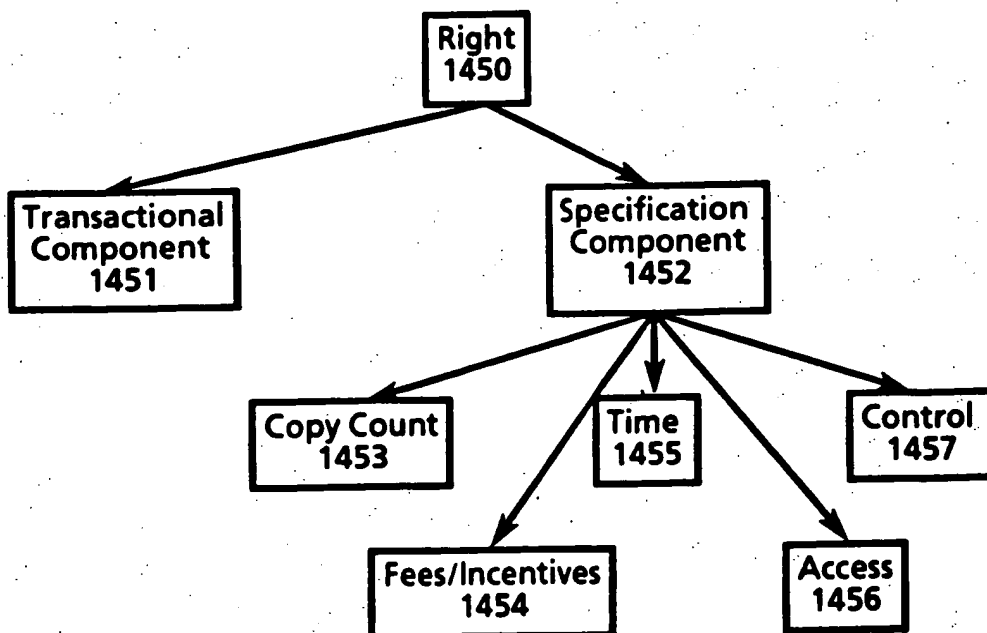


FIGURE 15

1501 ~ Digital Work Rights := (Rights*)

1502 ~ Right := (Right-Code {Copy-Count} {Control-Spec} {Time-Spec} {Access-Spec} {Fee-Spec})

1503 ~ Right-Code := Render-Code | Transport-Code | File-Management-Code | Derivative-Works-Code | Configuration-Code

1504 ~ Render-Code := [Play : {Player: Player-ID} | Print: {Printer: Printer-ID}]

1505 ~ Transport-Code := [Copy | Transfer | Loan {Remaining-Rights: Next-Set-of-Rights}] { (Next-Copy-Rights: Next-Set-of-Rights) }

1506 ~ File-Management-Code := Backup {Back-Up-Copy-Rights: Next-Set-of-Rights} | Restore | Delete | Folder | Directory {Name: Hide-Local | Hide-Remote} {Parts: Hide-Local | Hide-Remote}

1507 ~ Derivative-Works-Code := [Extract | Embed | Edit {Process: Process-ID}] { (Next-Copy-Rights: Next-Set-of-Rights) }

1508 ~ Configuration-Code := Install | Uninstall

1509 ~ Next-Set-of-Rights := { (Add: Set-Of-Rights) } { (Delete: Set-Of-Rights) } { (Replace: Set-Of-Rights) } { (Keep: Set-Of-Rights) }

1510 ~ Copy-Count := (Copies: positive-integer | 0 | Unlimited)

1511 ~ Control-Spec := (Control: {Restrictable | Unrestrictable} {Unchargeable | Chargeable})

1512 ~ Time-Spec := { (Fixed-Interval | Sliding-Interval | Meter-Time) } { Until: Expiration-Date }

1513 ~ Fixed-Interval := From: Start-Time

1514 ~ Sliding-Interval := Interval: Use-Duration

1515 ~ Meter-Time := Time-Remaining: Remaining-Use

1516 ~ Access-Spec := { (SC: Security-Class) {Authorization: Authorization-ID*} {Other-Authorization: Authorization-ID*} {Ticket: Ticket-ID} }

1517 ~ Fee-Spec := {Scheduled-Discount} Regular-Fee-Spec | Scheduled-Fee-Spec | Markup-Spec

1518 ~ Scheduled-Discount := Scheduled-Discount: (Scheduled-Discount: (Time-Spec Percentage)*)

1519 ~ Regular-Fee-Spec := { (Fee: | Incentive:) } [Per-Use-Spec | Metered-Rate-Spec | Best-Price-Spec | Call-For-Price-Spec] {Min: Money-Unit Per: Time-Spec} {Max: Money-Unit Per: Time-Spec} To: Account-ID

1520 ~ Per-Use-Spec := Per-Use: Money-unit

1521 ~ Metered-Rate-Spec := Metered: Money-Unit Per: Time-Spec

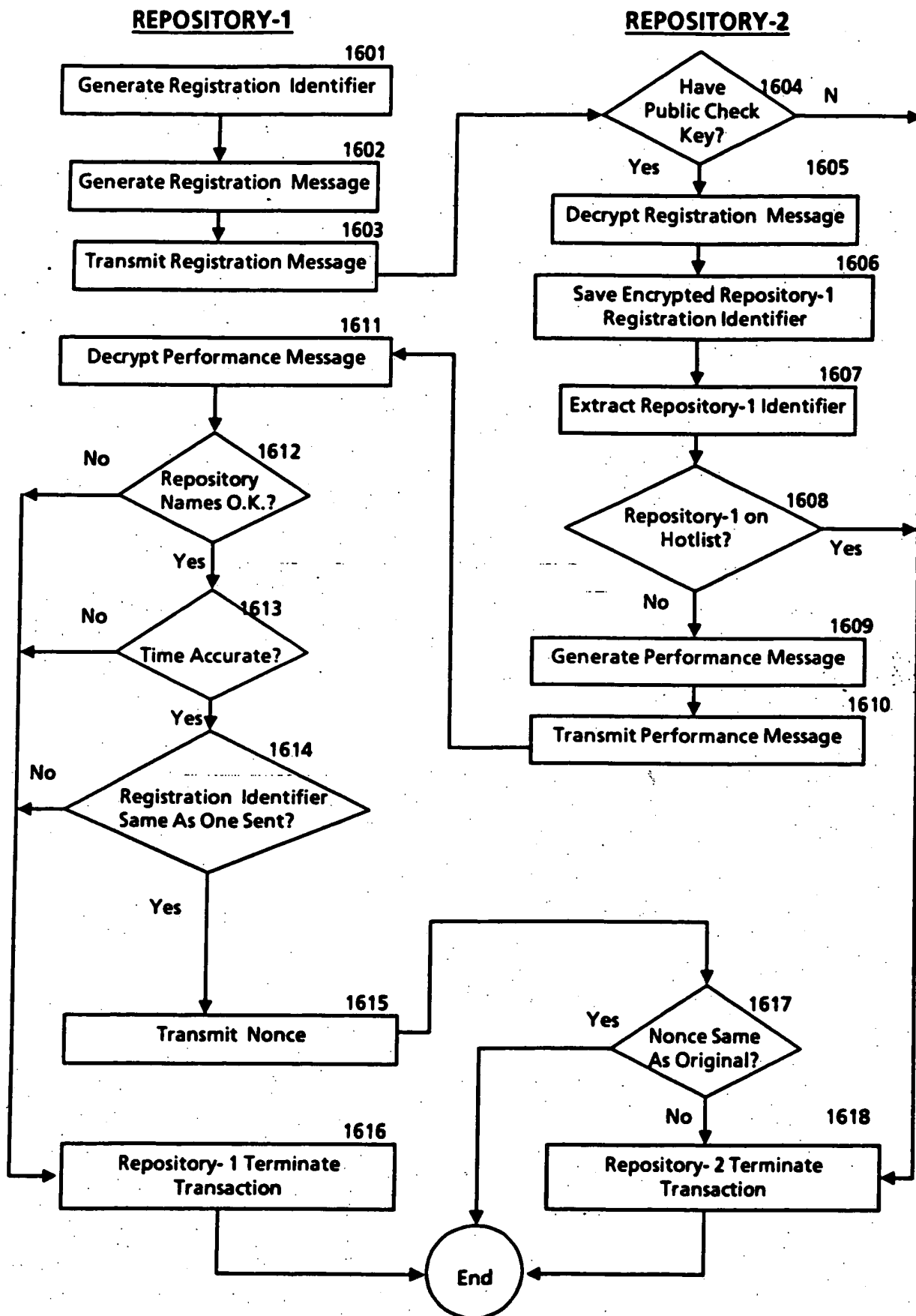
1522 ~ Best-Price-Spec := Best-Price: Money-unit Max: Money-unit

1523 ~ Call-For-Price-Spec := Call-For-Price

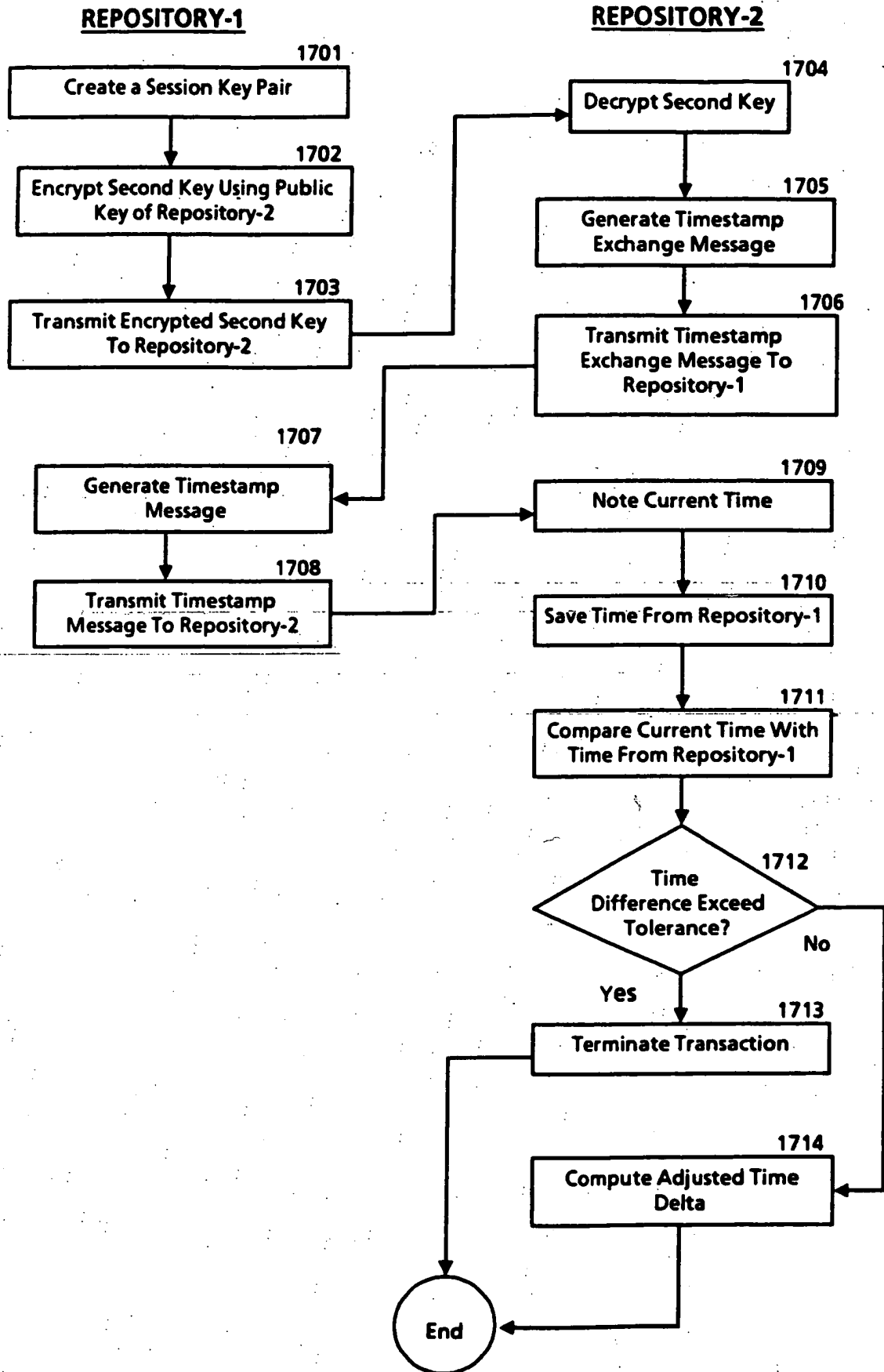
1524 ~ Scheduled-Fee-Spec := (Schedule: (Time-Spec Regular-Fee-Spec))

1525 ~ Markup-Spec := Markup: percentage To: Account-ID

Figure 16



Figur 17



Figur 18

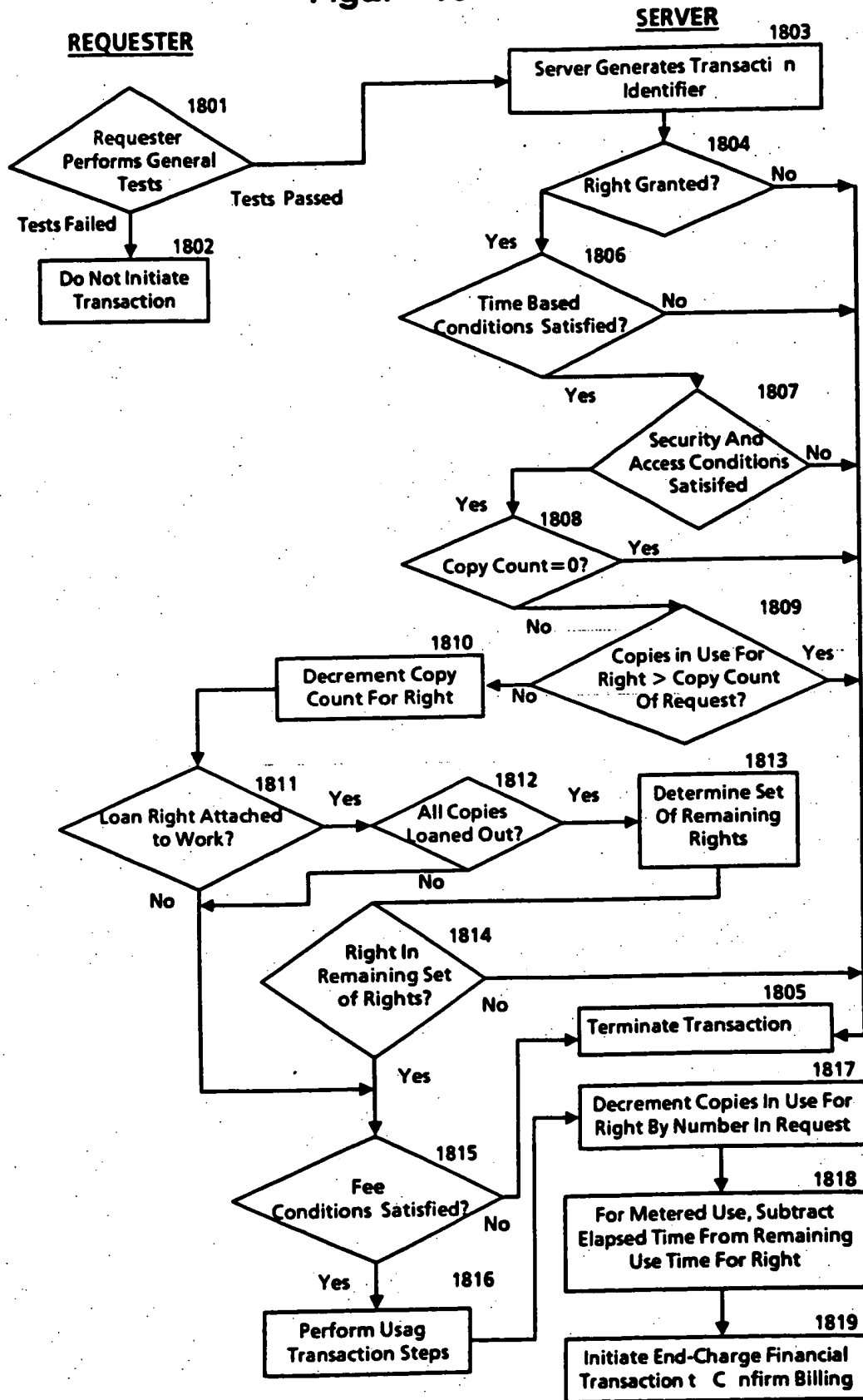
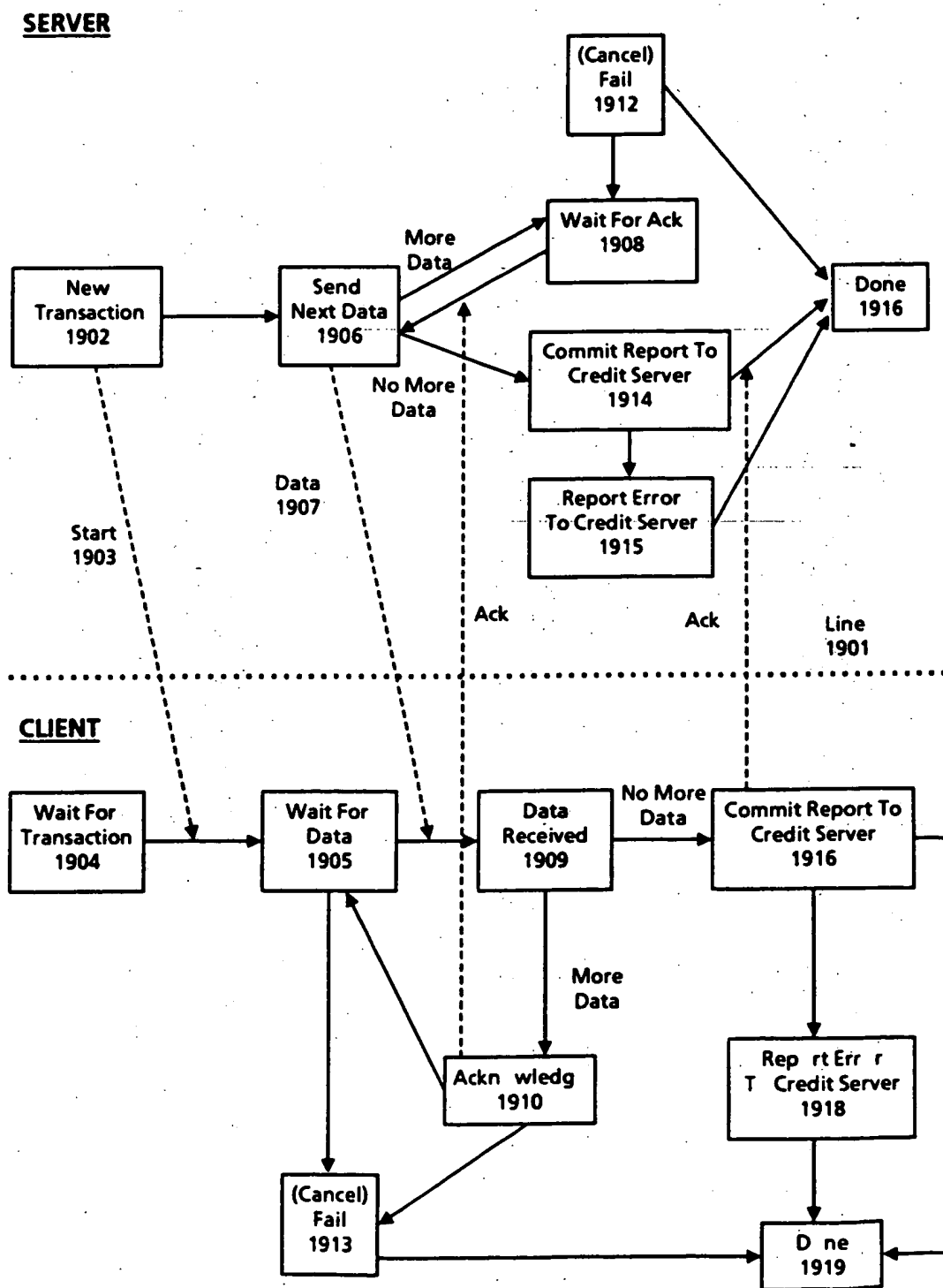


Figure 19



Declaration and Power of Attorney for Patent Application

As a below inventor, I hereby declare that:

Attorney's Docket No.

D/94789

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: **SYSTEM FOR CONTROLLING THE DISTRIBUTION AND USE OF DIGITAL WORKS UTILIZING DIGITAL TICKETS**

the specification of which

☒ is attached hereto

☐ was filed on as
Application Serial No.
and was amended on (if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application

(Number)

(Country)

(Day/Month/Year Filed)

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, of Federal Regulations Code, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.)

(Filing Date)

(Status)
(patented, pending, abandoned)

(Application Serial No.)

(Filing Date)

(Status)
(patented, pending, abandoned)

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Ronald Zibelli, Reg. No. 20,484;

Serge Abend,

Reg. No. 24,152;

John E. Beck, Reg. No. 22,833;

Richard B. Domingo,

Reg. No. 36,784

SEND CORRESPONDENCE TO:

Ronald Zibelli
Xerox Corporation
Xerox Square 020
Rochester, New York 14644

DIRECT TELEPHONE CALLS TO:

(name and telephone number)
Richard B. Domingo
415-812-4269

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Full name of sole or first inventor: **Mark J. Stefik**Inventor's Signature: *Mark J. Stefik* Date: 22 Nov 94Residence: **55 Big Tree Way, Woodside, California 94062**

Citizenship: U.S.A.

Post Office Address: same as above

Full name of second joint inventor, if any: **Peter L. T. Pirolli**Inventor's Signature: *Peter L. T. Pirolli* Date: 22 Nov 1994Residence: **44 Wildwood Place, El Cerrito, California 94530**

Citizenship: Canadian

Post Office Address: same as above

Full name of third joint inventor, if any:

Inventor's Signature: _____ Date: _____

Residence:

Citizenship:

Post Office Address:

Full name of fourth joint inventor, if any:

Inventor's Signature: _____ Date: _____

Residence:

Citizenship:

Post Office Address:

Full name of fifth joint inventor, if any:

Inventor's Signature: _____ Date: _____

Residence:

Citizenship:

Post Office Address:

Full name of sixth joint inventor, if any:

Inventor's Signature: _____ Date: _____

Residence:

Citizenship:

Post Office Address:

Full name of seventh joint inventor, if any:

Inventor's Signature: _____ Date: _____

Residence:

Citizenship:

Post Office Address:

Full name of eighth joint inventor, if any:

Inventor's Signature: _____ Date: _____

Residence:

Citizenship:

Post Office Address:

Full name of ninth joint inventor, if any:

Inventor's Signature: _____ Date: _____

Residence:

Citizenship:

Post Office Address:

APPLICATION DATA SHEET

Electronic Version 0.0.11

Stylesheet Version: 1.0

Attorney Docket Number: 111325-127

Publication Filing Type: new-utility

Application Type: utility

Title of Invention: SYSTEM FOR CONTROLLING THE DISTRIBUTION AND USE OF
DIGITAL WORKS UTILIZING DIGITAL TICKETS

Legal Representative:

Attorney or Agent: Marc S. Kaufman

Registration Number: 35212

Customer Number Correspondence Address: 22204

22204

Continuity Data:

This application is a continuation of 09/777,966 A1 2001-02-07 PENDING

which is a division of 08/967,084 A1 1997-11-10 6,236,971 A1 2001-05-22

and which is a continuation of 08/344,760 A1 1994-11-23 ABANDONED

Assignee (Publish): CONTENTGUARD HOLDINGS, INC.

103 Foulk Road, Suite 200-M

Wilmington, 19803 Delaware

INVENTOR(s):

Primary Citizenship: UNITED STATES

Given Name: Mark

Middle Name: J.

Family Name: STEFIK

Residence City: Portola Valley

Residence State: CA

Residence Country: US

Address: 10 Portola Green Circle

Portola Valley, California, 94028 US

- Primary Citizenship: CANADA
Given Name: Peter
- Middle Name: L.T.
Family Name: PIROLI
Residence City: San Francisco
Residence State: CA
Residence Country: US
Address: 2958 Sloat Boulevard
San Francisco, California, 94116 US

BEST AVAILABLE COPY

PATENT APPLICATION FEE DETERMINATION RECORD

Effective October 1, 2003

Application or Docket Number

10773306

CLAIMS AS FILED - PART I

	(Column 1)	(Column 2)
TOTAL CLAIMS	39	
FOR	NUMBER FILED	NUMBER EXTRA
TOTAL CHARGEABLE CLAIMS	39 minus 20 =	* 19
INDEPENDENT CLAIMS	7 minus 3 =	* 4
MULTIPLE DEPENDENT CLAIM PRESENT <input type="checkbox"/>		

* If the difference in column 1 is less than zero, enter "0" in column 2

CLAIMS AS AMENDED - PART II

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	*	Minus	**
Independent	*	Minus	***
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	*	Minus	**
Independent	*	Minus	***
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT C	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	*	Minus	**
Independent	*	Minus	***
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

SMALL ENTITY TYPE ☐

OR

OTHER THAN SMALL ENTITY

RATE	FEE
BASIC FEE	385.00
X\$ 9=	
X43=	
+145=	
TOTAL	

OR

RATE	FEE
BASIC FEE	770.00
X\$18=	
X86=	
+290=	
TOTAL	

SMALL ENTITY

OR

OTHER THAN SMALL ENTITY

RATE	ADDITIONAL FEE
X\$ 9=	
X43=	
+145=	
TOTAL ADDIT. FEE	

OR

RATE	ADDITIONAL FEE
X\$18=	
X86=	
+290=	
TOTAL ADDIT. FEE	

RATE	ADDITIONAL FEE
X\$ 9=	
X43=	
+145=	
TOTAL ADDIT. FEE	

OR

RATE	ADDITIONAL FEE
X\$18=	
X86=	
+290=	
TOTAL ADDIT. FEE	

RATE	ADDITIONAL FEE
X\$ 9=	
X43=	
+145=	
TOTAL ADDIT. FEE	

OR

RATE	ADDITIONAL FEE
X\$18=	
X86=	
+290=	
TOTAL ADDIT. FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."

***If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3."

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

PATENT APPLICATION SERIAL NO. _____

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE
FEE RECORD SHEET

02/12/2004 HMARZI1 00000035 192380 10773306

01 FC:1001	770.00 DA
02 FC:1201	344.00 DA
03 FC:1202	342.00 DA

PTO-1556
(5/87)



ITW

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/773,306	
	Filing Date	February 9, 2004	
	First Named Inventor	Mark J. STEFIK, et al.	
	Group Art Unit	2131	
	Examiner Name	Not Yet Assigned	
Total Number of Pages in This Submission		Attorney Docket Number	111325-127 (021100)

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Declaration and Power of Attorney <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input checked="" type="checkbox"/> Status Letter <input type="checkbox"/> Application Data Sheet <input type="checkbox"/> Request for Corrected Filing Receipt with Enclosures <input type="checkbox"/> A self-addressed prepaid postcard for acknowledging receipt <input type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks		<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees required or credit any overpayments to Deposit Account No. 19-2380 for the above identified docket number.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Carlos R. Villamar Registration No. 43,224 Nixon Peabody LLP 401 9 th Street, N.W., Suite 900 Washington, D.C. 20004-2129
Signature	
Date	6/16/05

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]	
I hereby certify that this correspondence is being:	
<input type="checkbox"/> deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop _____, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450	
<input type="checkbox"/> transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) _____.	
Date	Signature
	Typed or printed name



Attorney Docket No. 111325-127 (021100)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:)
Mark J. STEFIK , <i>et al.</i>	) Group Art Unit: 2131
Serial No. 10/773,306	) Examiner: Not Yet Assigned
Filed: February 9, 2004	) Confirmation No.: 6652
For: SYSTEM FOR CONTROLLING THE)
DISTRIBUTION AND USE OF DIGITAL)
WORKS UTILIZING DIGITAL TICKETS)

STATUS INQUIRY

United States Patent and Trademark Office
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir:

Please advise, in writing, as to the current status of the above-identified application.

Respectfully submitted,

NIXON PEABODY, LLP



Carlos R. Villamar
Registration No. 43,224

6/16/05

NIXON PEABODY LLP
Customer No. 22204
401 9th Street, N.W., Suite 900
Washington, DC 20004-2128
(202) 585-8000



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:)
Mark J. STEFIK, *et al.*) Examiner: Unassigned
Application No.: 10/773,306) Group Art Unit: 2131
Filed: February 9, 2004)
For: **SYSTEM FOR CONTROLLING THE**) Confirmation No.: 6652
DISTRIBUTION AND USE OF DIGITAL)
WORKS UTILIZING DIGITAL TICKETS)

United States Patent and Trademark Office
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir:

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97 (b)

In accordance with the duty of disclosure as set forth in 37 C.F.R. §1.56, Applicants hereby submit the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98. The references listed on the attached PTO-1449 forms have been made of record in related application serial number 09/777,966 filed on February 7, 2001, therefore no copies of the references cited are submitted herewith.

It is requested that the accompanying PTO-1449 be considered and made of record in the above-identified application. To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initial a copy of this form be returned to the undersigned.

The Commissioner is hereby authorized to charge any fees connected with this filing which may be required now, or credit any overpayment to Deposit Account No. 19-2380 (111325-127/021100).

Respectfully submitted,

NIXON PEABODY, LLP

By: _____

Carlos R. Villamar
Registration No. 43,224

Date: _____

6/16/05

Customer No. 22204

NIXON PEABODY LLP

401 9th Street, N.W., Suite 900

Washington, DC 20004-2128

Telephone: (202) 585-8000

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 10

Complete if Known

Application Number	10/773,306
Filing Date	February 9, 2004
First Named Inventor	Mark J. STEFIK, et al.
Art Unit	2131
Examiner Name	Not Yet Assigned
Attorney Docket Number	111325-127 (021100)

U.S. PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US-3,263,158	07/01/1996	Janis	
		US-3,609,697	09/28/1971	Blevins et al.	
		US-3,790,700	02/05/1974	Callais et al.	
		US-3,798,605	03/19/1974	Feistel	
		US-4,159,468	06/26/1979	Barnes et al.	
		US-4,220,991	09/02/1980	Hamano et al.	
		US-4,278,837	07/14/1981	Best	
		US-4,323,921	04/06/1982	Guillou	
		US-4,442,486	04/10/1984	Mayer	
		US-4,529,870	07/16/1985	Chaum	
		US-4,558,176	12/10/1985	Arnold et al.	
		US-4,593,376	06/03/1986	Volk	
		US-4,614,861	09/30/1986	Pavlov et al.	
		US-4,644,493	02/17/1987	Chandra et al.	
		US-4,658,093	04/14/1987	Hellman	
		US-4,713,753	12/15/1987	Beobert et al.	
		US-4,796,220	01/03/1989	Wolfe	
		US-4,817,140	03/28/1989	Chandra et al.	
		US-4,827,508	05/02/1989	Shear	
		US-4,868,376	09/19/1989	Lessin et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
		0 084 441 EP	07/27/1983	TABS LIMITED		
		0 180 460 EP	05/07/1986	SONY CORPORATION		
		0 332 707 EP	09/01/1989	HONDA GIKEN KOGYO KABUSHIKI KAISHA		
		0 538 216 A1 EP	04/21/1993	TELEVERKET		
		0 651 554 EP	05/03/1995	EASTMAN KODAK CO.		
		0 668 695 EP	08/23/1995	VICTOR COMPANY OF JAPAN LIMITED		
		0 725 376 EP	08/07/1996	SONY CORP.		
		2 136 175 GB	09/12/1984	ATALLA CORP.		
		2 236 604 GB	04/10/1991	SUN MICROSYSTEMS INC		
		0 715 241 JP	06/05/1996	MITSUBISHI CORP.		
		04-369068 JP	12/21/1992	CHIYUUBU NIHON DENKI SOFUTOEUA KK		Abst
Examiner Signature			Date Considered			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, et al.
				Art Unit	2131
				Examiner Name	Not Yet Assigned
Sheet	2	of	10	Attorney Docket Number	111325-127 (021100)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US-4,882,752	11/21/1989	Lindman et al.	
		US-4,891,838	01/02/1990	Faber	
		US-4,924,378	05/08/1990	Hershey et al.	
		US-4,932,054	06/05/1990	Chou et al.	
		US-4,937,863	06/26/1990	Robert et al.	
		US-4,949,187	08/14/1990	Cohen	
		US-4,953,209	08/28/1990	Ryder, Sr. et al.	
		US-4,961,142	10/02/1990	Elliott et al.	
		US-4,975,647	12/04/1990	Downer et al.	
		US-4,977,594	12/11/1990	Shear	
		US-4,999,806	03/12/1991	Chernow et al.	
		US-5,010,571	04/23/1991	Katznelson	
		US-5,014,234	05/07/1991	Edwards, Jr.	
		US-5,023,907	06/11/1991	Johnson et al.	
		US-5,047,928	09/10/1991	Wiedemer	
		US-5,050,213	09/17/1991	Shear	
		US-5,052,040	09/24/1991	Preston et al.	
		US-5,058,164	10/15/1991	Elmer et al.	
		US-5,103,476	04/07/1992	Waite et al.	
		US-5,113,519	05/12/1992	Johnson et al.	
		US-5,136,643	08/04/1992	Fischer	

FOREIGN PATENT DOCUMENTS							
Examiner Initials ²	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴ Kind Code ⁵ (if known)				
		05-268415	JP	10/15/1993	RICOH CO LTD		Abst
		06-175794	JP	06/24/1994	FUJI XEROX CO LTD		Abst
		06-215010	JP	08/05/1994	SONY CORP.		Abst
		07-084852	JP	03/31/1995	HITACHI LTD.		Abst
		07-200317	JP	08/04/1995	TOSHIBA CORP.		Abst
		07-244639	JP	09/19/1995	FUJITSU LTD		Abst
		62-241061	JP	10/21/1987	NEC CORP.		Abst
		64-068835	JP	03/14/1989	RYOICHI MORI		Abst
		WO 01/63528	PCT	08/30/2001	IPDN COPR.		
		WO 92/20022	PCT	11/12/1992	DIGITAL EQUIPMENT CORP.		

Examiner Signature	Date Considered
-----------------------	--------------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				<i>Complete if Known</i>	
				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, <i>et al.</i>
				Art Unit	2131
				Examiner Name	Not Yet Assigned
				Attorney Docket Number	111325-127 (021100)
Sheet	3	of	10		

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US-5,138,712	08/11/1992	Corbin	
		US-5,146,499	09/08/1992	Geffrotin	
		US-5,148,481	09/15/1992	Abraham et al.	
		US-5,159,182	10/27/1992	Eisele	
		US-5,183,404	02/02/1993	Aldous et al.	
		US-5,191,193	03/02/1993	Le Roux	
		US-5,224,163	06/29/1993	Gasser et al.	
		US-5,204,897	04/20/1993	Wyman	
		US-5,222,134	06/22/1993	Waite et al.	
		US-5,229,263	03/29/1994	Beller et al.	
		US-5,235,642	08/10/1993	Wobber et al.	
		US-5,247,575	09/21/1993	Sprague et al.	
		US-5,255,106	10/19/1993	Castro	
		US-5,260,999	11/09/1993	Wyman	
		US-5,263,157	11/16/1993	Janis	
		US-5,263,158	11/16/1993	Janis	
		US-5,276,444	01/04/1994	McNair	
		US-5,276,735	01/04/1994	Boebert et al.	
		US-5,291,596	03/01/1994	Mita	
		US-5,301,231	04/05/1994	Abraham et al.	
		US-5,311,591	05/10/1994	Fischer	
		US-5,319,705	06/07/1994	Halter et al.	

FOREIGN PATENT DOCUMENTS							
Examiner Initials ^a	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴	Kind Code ⁵ (if known)				
		WO 93/01550	PCT	01/21/1993	INFOLOGIC SOFTWARE, INC		
		WO 94/01821	PCT	01/20/1994	SECURE COMPUTING CORP.		
		WO 96/24092	PCT	08/08/1996	BENSON, Greg		
		WO 97/48203	PCT	12/18/1997	INTEL CORP.		
		WO 98/11690	PCT	03/19/1998	GLOVER, John J.		
		WO 98/42098	PCT	09/24/1998	CRYPTOWORKS, INC.		
		WO 99/49615	PCT	09/30/1999	MICROTOME		
Examiner Signature				Date Considered			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.**

Petitioner Apple Inc. - Exhibit 1010, p. 165

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, <i>et al.</i>
				Art Unit	2131
				Examiner Name	Not Yet Assigned
				Attorney Docket Number	111325-127 (021100)
Sheet	5	of	10		

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US-5,504,818	04/02/1996	Okano	
		US-5,504,837	04/02/1996	Griffeth et al.	
		US-5,509,070	04/16/1996	Schull	
		US-5,530,235	06/25/1996	Stefik et al.	
		US-5,532,920	07/02/1996	Hartrick et al.	
		US-5,534,975	07/09/1996	Stefik et al.	
		US-5,539,735	07/23/1996	Moskowitz	
		US-5,563,946	10/08/1996	Cooper et al.	
		US-5,568,552	10/22/1996	Davis	
		US-5,621,797	04/15/1997	Rosen	
		US-5,629,980	05/13/1997	Stefik et al.	
		US-5,633,932	05/27/1997	Davis et al.	
		US-5,634,012	05/27/1997	Stefik et al.	
		US-5,638,443	06/10/1997	Stefik et al.	
		US-5,649,013	07/15/1997	Stuckey et al.	
		US-5,655,077	08/05/1997	Jones et al.	
		US-5,708,717	01/13/1998	Alasia	
		US-5,734,823	03/31/1998	Saigh et al.	
		US-5,734,891	03/31/1998	Saigh	
		US-5,737,413	04/07/1998	Akiyama et al.	

[illegible]

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known			
				Application Number		10/773,306	
				Filing Date		February 9, 2004	
				First Named Inventor		Mark J. STEFIK, <i>et al.</i>	
				Art Unit		2131	
				Examiner Name		Not Yet Assigned	
Sheet	6	of	10	Attorney Docket Number		111325-127 (021100)	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US-5,737,416	04/07/1998	Cooper et al.	
		US-5,745,569	04/28/1998	Moskowitz et al.	
		US-5,748,783	05/05/1998	Rhoads	
		US-5,757,907	05/26/1998	Cooper et al.	
		US-5,761,686	06/02/1998	Bloomberg	
		US-5,765,152	06/09/1998	Erickson	
		US-5,768,426	06/16/1998	Rhoads	
		US-5,825,892	10/20/1998	Braudaway et al.	
		US-5,892,900	04/06/1999	Ginter et al.	
		US-5,910,987	06/08/1999	Ginter et al.	
		US-5,915,019	06/22/1999	Ginter et al.	
		US-5,917,912	06/29/1999	Ginter et al.	
		US-5,920,861	07/06/1999	Hall et al.	
		US-5,940,504	08/17/1999	Griswold	
		US-5,943,422	08/24/1999	Van Wie et al.	
		US-5,949,876	09/07/1999	Ginter et al.	
		US-5,982,891	11/09/1999	Ginter et al.	
		US-5,999,949	12/07/1999	Crandall	
		US-6,047,067	04/04/2000	Rosen	
		US-6,112,181	08/29/2000	Shear et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³	Number ⁴			

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, <i>et al.</i>
				Group Art	2131
				Examiner Name	Not Yet Assigned
				Attorney Docket Number	111325-127 (021100)
Sheet	7	of	10		

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US-6,115,471	09/05/2000	Oki et al.	
		US-6,138,119	10/24/2000	Hall et al.	
		US-6,157,721	12/05/2000	Shear et al.	
		US-6,185,683	02/06/2001	Ginter et al.	
		US-6,226,618	05/01/2001	Downs et al.	
		US-6,233,684	05/15/2001	Stefik et al.	
		US-6,237,786	05/29/2001	Ginter et al.	
		US-6,240,185	05/29/2001	Van Wie et al.	
		US-6,253,193	06/26/2001	Ginter et al.	
		US-6,266,618	05/01/2001	Downs, et al.	
		US-6,292,569	09/18/2001	Shear et al.	
		US-6,301,660	10/09/2001	Benson	
		US-6,327,652	12/04/2001	England et al.	
		US-6,330,670	12/11/2001	England et al.	
		US-6,345,256	02/05/2002	Milsted et al.	
		US-6,363,488	05/26/2002	Ginter et al.	
		US-6,389,402	05/14/2002	Ginter et al.	

[illegible]

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, <i>et al.</i>
				Art Unit	2131
				Examiner Name	Not Yet Assigned
Sheet	8	of	10	Attorney Docket Number	111325-127 (021100)

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		"National Semiconductor and EPR Partner for Information Metering/Data Security Cards" March 4, 1994, Press Release from Electronic Publishing Resources, Inc.	
		Weber, R., "Digital Rights Management Technology" October 1995	
		Flasche, U. et al., "Decentralized Processing of Documents", pp. 119-131, 1986, Comput. & Graphics, Vol. 10, No. 2	
		Mori, R. et al., "Superdistribution: The Concept and the Architecture", pp. 1133-1146, 1990. The Transactions of the IEICE, Vo. E 73, No. 7, Tokyo, JP	
		Weber, R., "Metering Technologies for Digital Intellectual Property", pp. 1-29, Oct. 1994, A Report to the International Federation of Reproduction Rights Organizations	
		Clark, P.C. et al., "Bits: A Smartcard protected Operating System", pp. 66-70 and 94, November 1994, Communications of the ACM, Vol. 37, No. 11	
		Ross, P.E., "Data Guard", pp. 101, June 6, 1994, Forbes	
		Saigh, W.K., "Knowledge is Sacred", 1992, Video Pocket/Page Reader Systems, Ltd.	
		Kahn, R.E., "Deposit, Registration and Recordation in an Electronic Copyright Management System", pp. 1-19, August 1992, Corporation for National Research Initiatives, Virginia	
		Hilts, P. et al., "Books While U Wait", pp. 48-50, January 3, 1994, Publishers Weekly	
		Strattner, A., "Cash Register on a Chip may Revolutionize Software Pricing and Distribution; Wave Systems Corp.", pp. 1-3, April 1994, Computer Shopper, Vol. 14, No. 4, ISSN 0886-0556	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, <i>et al.</i>
				Art Unit	2131
				Examiner Name	Not Yet Assigned
Sheet	9	of	10	Attorney Docket Number	111325-127 (021100)

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		O'Conner, M., "New Distribution Option for Electronic Publishers; iOpener Data Encryption and Metering System for CD-ROM use; Column", pp. 1-6, March 1994, CD-ROM Professional, Vol. 7, No. 2, ISSN: 1409-0833	
		Willett, S., "Metered PCs: Is Your System Watching You? Wave System beta tests new technology", pp. 84, May 2, 1994, InfoWorld	
		Linn, R., "Copyright and Information Services in the Context of the National Research and Education Network", pp. 9-20, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Perrit, Jr., H., "Permission Headers and Contract Law", pp. 27-48, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Upthegrove, L., "Intellectual Property Header Descriptors: A Dynamic Approach", pp. 63-66, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Sirbu, M., "Internet Billing Service Design and prototype Implementation", pp. 67-80, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Simmell, S. et al., "Metering and Licensing of Resources: Kala's General Purpose Approach", pp. 81-110, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Kahn, R., "Deposit, Registration and Recordation in an Electronic Copyright Management System", pp. 111-120, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Tygar, J. et al., "Dyad: A System for Using Physically Secure Coprocessors", pp. 121-152, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Griswold, G., "A Method for Protecting Copyright on Networks", pp. 169-178, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, <i>et al.</i>
				Art Unit	2131
				Examiner Name	Not Yet Assigned
Sheet	10	of	10	Attorney Docket Number	111325-021100)

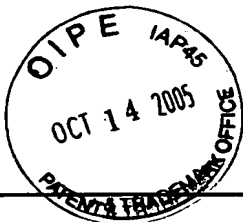
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Nelson, T., "A Publishing and Royalty Model for Networked Documents", pp. 257-259, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Robinson, E., "Redefining Mobile Computing", pp. 238-240, 247-248 and 252, July 1993, PC Computing	
		Abadi, M. et al., "Authentication and Delegation with Smart-cards", PP. 1-24, 1990, Research Report DEC Systems Research Center	
		Mark Stefik, "Letting Loose the Light: Igniting Commerce in Electronic Publication", pp. 219-253, 1996, Internet Dreams: Archetypes, Myths, and Metaphors, IDSN 0-262-19373-6	
		Mark Stefik, "Letting Loose the Light: Igniting Commerce in Electronic Publication", pp. 2-35, February 8, 1995, Internet Dreams: Archetypes, Myths and Metaphors	
		Henry H. Perritt, Jr., "Technological Strategies for Protecting Intellectual Property in the Networked Multimedia Environment", April 2-3, 1993, Knowbots, Permissions Headers & Contract Law	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.



IPW

TRANSMITTAL FORM (to be used for all correspondence after initial filing)		Application Number	10/773,306
		Filing Date	February 9, 2004
		First Named Inventor	Mark J. STEFIK, et al.
		Group Art Unit	2131
		Examiner Name	Not Yet Assigned
Total Number of Pages in This Submission		Attorney Docket Number	111325-127 (021100)
		Confirmation Number	6652

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Declaration and Power of Attorney <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Application Data Sheet <input type="checkbox"/> Request for Corrected Filing Receipt with Enclosures <input type="checkbox"/> A self-addressed prepaid postcard for acknowledging receipt <input type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks		<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees required or credit any overpayments to Deposit Account No. 19-2380 for the above identified docket number.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Carlos R. Villamar Registration No. 43,224 Nixon Peabody LLP 401 9 th Street, N.W., Suite 900 Washington, D.C. 20004-2128
Signature	
Date	10/14/05

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]	
I hereby certify that this correspondence is being:	
<input type="checkbox"/> deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop _____, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450	
<input type="checkbox"/> transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) _____.	
Date	Signature
	Typed or printed name



UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:)
Mark J. **STEFIK**, *et al.*) Examiner: Not Yet Assigned
Serial No. 10/773,306) Group Art Unit: 2131
Filed: February 9, 2004)
Confirmation No.: 6652
For: **SYSTEM FOR CONTROLLING THE**)
DISTRIBUTION AND USE OF DIGITAL)
WORKS UTILIZING DIGITAL TICKETS)

United States Patent and Trademark Office
Customer Services Window
Randolph Building
401 Dulany Street
Alexandria, VA 222314

INFORMATION DISCLOSURE STATEMENT

Sir:

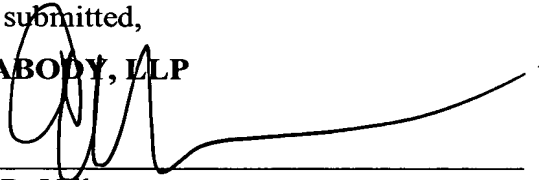
In accordance with the duty of disclosure as set forth in 37 C.F.R. §1.56, Applicants hereby submit the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98. In accordance with the duty of disclosure as set forth in 37 C.F.R. §1.56, Applicants hereby submit the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98. In accordance with the PTO notice dated July 11, 2003, waiving the requirement under 37 CFR 1.98 (a)(2)(i) for submitting copies of each cited U.S. Patent, for all U.S. national patent applications filed after June 30, 2003, no copies of U.S. Patents are enclosed.

This document is being submitted before the first Office Action on the merits, therefore no fee or certification is required under 37 C.F.R. § 1.97(b).

It is requested that the accompanying PTO-1449 be considered and made of record in the above-identified application. To assist the Examiner, the document is listed on the attached form PTO-1449. It is respectfully requested that an Examiner initial a copy of this form be returned to the undersigned.

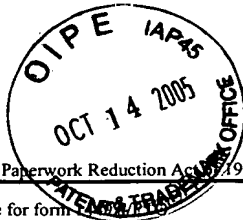
The Commissioner is hereby authorized to charge any fees connected with this filing which may be required now, or credit any overpayment to Deposit Account No. 19-2380 (111325-127/021100).

Respectfully submitted,
NIXON PEABODY, LLP

By: 

Carlos R. Villamar
Registration No. 43,224

NIXON PEABODY LLP
Customer No. 22204
401 9th Street, N.W., Suite 900
Washington, DC 20004-2128
Telephone: (202) 585-8000



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, et al.
				Art Unit	2131
				Examiner Name	Not Yet Assigned
Sheet	1	of	1	Attorney Docket Number	111325-127 (021100)

U.S. PATENT DOCUMENTS					
Examiner Initials ⁵	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		6,135,646	October 24, 2000	Kahn et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials ⁵	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ³ (if known)				

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ⁵	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

NOV. 22. 2005 7:31PM

866 741 0075

NO. 4770 P. 1

RECEIVED
CENTRAL FAX CENTER

NOV 22 2005 Docket No. 111325-21100

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Mark J. STEFIK et al.

Serial No. 10/773,306

Filed: February 9, 2004

For: SYSTEM FOR CONTROLLING THE
DISTRIBUTION AND USE OF
DIGITAL WORKS UTILIZING
DIGITAL TICKETS

)

) Group Art Unit: 2131

) Confirmation No.: 6652

)

)

)

)

)

Certificate of Transmission

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (571)273-8300) on November 22, 2005.


Geraldine Maddox


STATUS INQUIRY

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

Please advise, in writing, as to the current status of the above-identified application.

Respectfully submitted,


Marc S. Kaufman
Registration No. 35,212

NIXON PEABODY LLP
Suite 900
401 9th Street, N.W.
Washington, DC 20004-2128
(202) 585-8000

Dated: November 22, 2005

W688950.1



JPW

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/773,306
	Filing Date	February 9, 2004
	First Named Inventor	Mark J. STEFIK, et al.
	Group Art Unit	2131
	Examiner Name	Not Yet Assigned
Total Number of Pages in This Submission	Attorney Docket Number	111325-127 (021100)

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input checked="" type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input checked="" type="checkbox"/> Declaration and Power of Attorney <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Application Data Sheet <input type="checkbox"/> Request for Corrected Filing Receipt with Enclosures <input type="checkbox"/> A self-addressed prepaid postcard for acknowledging receipt <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): <ol style="list-style-type: none">1. Letter Requesting Correction of Inventorship Under 37 C.F.R. 1.482. Statements to be executed by Stefik; Pirolli and Merkle in Support of the Letter re Correction of Inventorship Under 37 C.F.R. 1.483. Written Consent of the Assignee
Remarks	<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees required or credit any overpayments to Deposit Account No. 19-2380 for the above identified docket number.	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Carlos R. Villamar Registration No. 43,224 Nixon Peabody LLP 401 9 th Street, N.W., Suite 900 Washington, D.C. 20004-2128
Signature	
Date	3/15/06

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]	
I hereby certify that this correspondence is being:	
<input type="checkbox"/> deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop _____, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450	
<input type="checkbox"/> transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) _____.	
Date	Signature
	Typed or printed name

FEE TRANSMITTAL FOR FY 2005

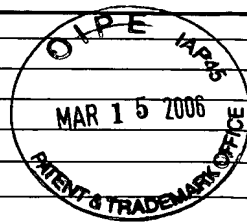
Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT \$40.00

Complete if Known

Application Number 10/773,306
Filing Date February 9, 2004
First Named Inventor Mark J. STEFIK, et al.
Examiner Name Not Yet Assigned
Art Unit 2131
Attorney Docket No. 111325-127 (021100)



METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number 19-2380

Deposit Account Name Nixon Peabody LLP

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
1001	300	2001	150	Utility filing fee	
1002	200	2002	100	Design filing fee	
1003	200	2003	100	Plant filing fee	
1004	300	2004	150	Reissue filing fee	
1005	200	2005	100	Provisional filing fee	

SUBTOTAL (1) (\$ 0)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
-20** =	X		0
Independent Claims	-3** =	X	0
Multiple Dependent	X		0

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1202	50	2202	25	Claims in excess of 20
1204	200	2201	100	Independent claims in excess of 3
1203	360	2203	180	Multiple dependent claim, if not paid
1204	200	2204	100	** Reissue independent claims over original patent
1205	50	2205	25	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 0)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1051	130	2051	65	Surcharge - late filing fee or oath
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet
1053	130	1053	130	Non-English specification
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action
1251	120	2251	60	Extension for reply within first month
1252	450	2252	225	Extension for reply within second month
1253	1,020	2253	510	Extension for reply within third month
1254	1,590	2254	795	Extension for reply within fourth month
1255	2,160	2255	1,080	Extension for reply within fifth month
1401	500	2401	250	Notice of Appeal
1402	500	2402	250	Filing a brief in support of an appeal
1403	1,000	2403	500	Request for oral hearing
1451	1,510	1451	1,510	Petition to institute a public use proceeding
1452	500	2452	250	Petition to revive - unavoidable
1453	1,500	2453	750	Petition to revive - unintentional
1501	1,400	2501	700	Utility issue fee (or reissue)
1502	800	2502	400	Design issue fee
1503	1,100	2503	550	Plant issue fee
1460	130	1460	130	Petitions to the Commissioner
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)
1806	180	1806	180	Submission of Information Disclosure Stmt
8021	40	8021	40	Recording each patent assignment per property (times number of properties)
1809	790	2809	395	Filing a submission after final rejection (37 CFR 1.129(a))
1810	790	2810	395	For each additional invention to be examined (37 CFR 1.129(b))
1801	790	2801	395	Request for Continued Examination (RCE)
1802	900	1802	900	Request for expedited examination of a design application

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

\$40.00

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]

I hereby certify that this correspondence is being:

- ☐ deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop _____, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450
- ☐ transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) _____.

Date

Signature

Typed or printed name

SUBMITTED BY

Name (Print/Type) Carlos R. Villamar
Signature

Registration No. 43,224
(Attorney/Agent)

Complete (if applicable)

Telephone (202) 585-8203
Date 3/15/06

SEND TO: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450



Attorney Docket No. 111325-127 (021100)
Application No. 10/773,306

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT Application of	) Confirmation No. 6652
Mark J. STEFIK, <i>et al.</i>	) Group Art Unit: 2131
Application Serial No.: 10/773,306	) Examiner: Not Yet Assigned
Filed: February 9, 2004)
For: SYSTEM FOR CONTROLLING THE)
DISTRIBUTION AND USE OF DIGITAL)
WORKS UTILIZING DIGITAL TICKETS)

United States Patent and Trademark Office
Customer Services Window
Randolph Building
401 Dulany Street
Alexandria, VA 222314

LETTER REQUESTING CORRECTION OF INVENTORSHIP

UNDER 37 C.F.R. 1.48

Sir:

This letter requests the correction for the incorrect original naming of inventors in the above noted application filed on February 9, 2004. It is requested that the inventorship of the above identified application be corrected to add:

Ralph Merkle
1134 Pimento Avenue
Sunnyvale, California 94087

Pursuant to the requirements of 37 C.F.R. 1.48(a), please find attached a newly executed Declaration and Assignment by all the inventors, and letters from Mark J. Stefik and Peter L.T. Pirolli stating that the error in omission of Ralph Merkle as an inventor of the subject matter of at least one claim of the instant application occurred without deceptive intent on their part.



Attorney Docket No. 111325-127 (021100)
Application No. 10/773,306

Respectfully submitted,
NIXON PEABODY, LLP

By: _____


Carlos B. Villarreal

Registration No. 43,224

NIXON PEABODY LLP
401 9th Street, N.W., Suite 900
Washington, DC 20004
Telephone: (202) 585-8000
Facsimile (202) 585-8080



Attorney's Docket No. 111325-127 (021100)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	) Confirmation No.: 6652
Mark J. STEFIK, <i>et al.</i>	) Group Art Unit: 2131
Serial No. 10/773,306	) Examiner: Not Yet Assigned
Filed: February 9, 2004)
For: SYSTEM FOR CONTROLLING THE)
DISTRIBUTION AND USE OF)
DIGITAL WORKS UTILIZING)
DIGITAL TICKETS)

United States Patent and Trademark Office
Customer Services Window
Randolph Building
401 Dulany Street
Alexandria, VA 222314

STATEMENT BY MARK J. STEFIK

IN SUPPORT OF THE LETTER RE CORRECTION OF INVENTORSHIP

UNDER 37 C.F.R. 1.48

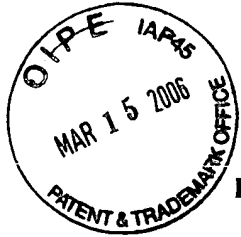
Sir:

Pursuant to the requirements of 37 C.F.R. 1.48(a)(2), it is hereby stated that the error in failing to list Ralph C. Merkle as third inventor for the above identified patent application occurred without deceptive intention on my part.

Respectfully submitted,

Date: 21 Feb 2006

Mark J. Stefik
Mark J. Stefik



Attorney's Docket No. 111325-127 (021100)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	) Confirmation No.: 6652
Mark J. STEFIK, <i>et al.</i>	) Group Art Unit: 2131
Serial No. 10/773,306	) Examiner: Not Yet Assigned
Filed: February 9, 2004)
For: SYSTEM FOR CONTROLLING THE)
DISTRIBUTION AND USE OF)
DIGITAL WORKS UTILIZING)
DIGITAL TICKETS)

United States Patent and Trademark Office
Customer Services Window
Randolph Building
401 Dulany Street
Alexandria, VA 222314

STATEMENT BY PETER L.T. PIROLI
IN SUPPORT OF THE LETTER RE CORRECTION OF INVENTORSHIP
UNDER 37 C.F.R. 1.48

Sir:

Pursuant to the requirements of 37 C.F.R. 1.48(a)(2), it is hereby stated that the error in failing to list Ralph C. Merkle as third inventor for the above identified patent application occurred without deceptive intention on my part.

Respectfully submitted,

Date:

2/21/2006

Peter L.T. Pirolli
Peter L.T. Pirolli



Attorney's Docket No. 111325-127 (021100)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	) Confirmation No.: 6632
Mark J. STEFIK, et al	) Group Art Unit: 2131
Serial No. 10/773,306	) Examiner: Not Yet Assigned
Filed: February 9, 2004)
For: SYSTEM FOR CONTROLLING THE)
DISTRIBUTION AND USE OF)
DIGITAL WORKS UTILIZING)
DIGITAL TICKETS)

United States Patent and Trademark Office
Customer Services Window
Randolph Building
401 Dulany Street
Alexandria, VA 222314

STATEMENT BY RALPH C. MERKLE
IN SUPPORT OF THE LETTER RE CORRECTION OF INVENTORSHIP
UNDER 37 C.F.R. 1.48

Sir:

Pursuant to the requirements of 37 C.F.R. 1.48(a)(2), it is hereby stated that the error in failing to list myself as inventor of the above identified patent application occurred without deceptive intention on my part.

Respectfully submitted,

Date: Jan 14th
2006

Ralph C. Merkle
Ralph C. Merkle

W091738.1

BEST AVAILABLE COPY



Attorney's Docket No. 111325-127 (021100)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	) Confirmation No.: 6652
Mark J. STEFIK, <i>et al.</i>	) Group Art Unit: 2131
Serial No. 10/773,306	) Examiner: Not Yet Assigned
Filed: February 9, 2004)
For: SYSTEM FOR CONTROLLING THE)
DISTRIBUTION AND USE OF)
DIGITAL WORKS UTILIZING)
DIGITAL TICKETS)

United States Patent and Trademark Office
Customer Services Window
Randolph Building
401 Dulany Street
Alexandria, VA 222314

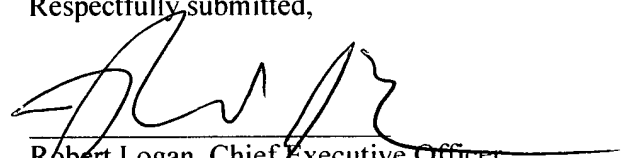
WRITTEN CONSENT OF THE ASSIGNEE
IN SUPPORT OF THE LETTER RE CORRECTION OF INVENTORSHIP
UNDER 37 C.F.R. 1.48

Sir:

Pursuant to the requirements of 37 C.F.R. 1.48(a)(2), it is hereby stated that the error in failing to list Ralph C. Merkle as third inventor for the above identified patent application occurred without deceptive intention on the part of the Assignee.

Respectfully submitted,

Date: 2/22/06


Robert Logan, Chief Executive Officer
ContentGuard Holdings, Inc.
Assignee



DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN
APPLICATION DATA SHEET (37 CFR 1.76) AND POWER OF ATTORNEY

Attorney Docket No. 111325-127 (021100)

Title of Invention **SYSTEM FOR CONTROLLING THE DISTRIBUTION AND USE OF DIGITAL
WORKS UTILIZING DIGIAL TICKETS**

As the below named inventor(s), I/we declare that:

This declaration is directed to:

- ☐ The attached application, or
☒ Application No. 10/773,306 filed on February 9, 2004
☐ as amended on _____ (if applicable);

I/We believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/We have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/We acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application.

All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

I/We hereby appoint:

Practitioners at Customer Number 22204 as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

FULL NAME OF INVENTOR(S)

Inventor one: Mark J. STEFIK

Signature: *Mark J. Stefik* Citizen of: UNITED STATES

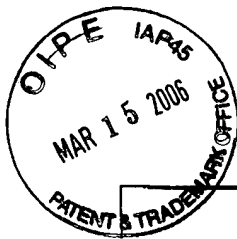
Inventor two: Peter L.T. PIROLI

Signature: *Peter L.T. Piroli* Citizen of: CANADIAN

Inventor three: Ralph MERKLE

Signature: _____ Citizen of: UNITED STATES

☒ Additional inventors are being named on the additional form(s) attached hereto.



DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN
APPLICATION DATA SHEET (37 CFR 1.76) AND POWER OF ATTORNEY

Attorney Docket No. 111325-127 (021100)

Title of Invention **SYSTEM FOR CONTROLLING THE DISTRIBUTION AND USE OF DIGITAL
WORKS UTILIZING DIGITAL TICKETS**

As the below named inventor(s), I/we declare that:

This declaration is directed to:

- ☐ The attached application, or
☒ Application No. 10/773,306 filed on February 9, 2004
☐ as amended on _____ (If applicable);

I/We believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/We have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/We acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application.

All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

I/We hereby appoint:

Practitioners at Customer Number 22204 as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

FULL NAME OF INVENTOR(S)

Inventor one: Mark J. STEPIK

Signature: _____ Citizen of: UNITED STATES

Inventor two: Peter L.T. PIROLI

Signature: _____ Citizen of: CANADIAN

Inventor three: Ralph MERKLE

Signature: [Signature] Citizen of: UNITED STATES

☒ Additional inventors are being named on the additional form(s) attached hereto.

BEST AVAILABLE COPY



APPLICATION DATA SHEET

Electronic Version v14

Stylesheet Version v14.1

*Applicant Information:*Inventor 1:

Applicant Authority Type:	Inventor
Citizenship:	US
Given Name:	Mark
Middle Name:	J.
Family Name:	STEFIK
City of Residence:	San Francisco
State of Residence:	CA
Country of Residence:	US
Address-1 of Mailing Address:	10 Portola Green Circle
Address-2 of Mailing Address:	
City of Mailing Address:	Portola Valley
State of Mailing Address:	CA
Postal Code of Mailing Address:	94028
Country of Mailing Address:	US
Phone:	
Fax:	
E-mail:	

Inventor 2:

Applicant Authority Type:	Inventor
Citizenship:	CA
Given Name:	Peter
Middle Name:	L.T.
Family Name:	PIROLI
City of Residence:	San Francisco
State of Residence:	CA
Country of Residence:	US
Address-1 of Mailing Address:	2958 Sloat Boulevard
Address-2 of Mailing Address:	

City of Mailing Address: San Francisco
State of Mailing Address: CA
Postal Code of Mailing Address: 94116
Country of Mailing Address: US
Phone:
Fax:
E-mail:

Inventor 3:

Applicant Authority Type: Inventor
Citizenship: US
Given Name: Ralph
Middle Name: C.
Family Name: MERKLE
City of Residence: Sunnyvale
State of Residence: CA
Country of Residence: US
Address-1 of Mailing Address: 1134 Pimento Avenue
Address-2 of Mailing Address:
City of Mailing Address: Sunnyvale
State of Mailing Address: CA
Postal Code of Mailing Address: 94087
Country of Mailing Address: US
Phone:
Fax:
E-mail:

Correspondence Information:

Customer Number: 22204 *22204*

Application Information:

Title of Invention: SYSTEM FOR CONTROLLING THE DISTRIBUTION AND
USE OF DIGITAL WORKS UTILIZING DIGITAL TICKETS
Application Type: regular, utility

Attorney Docket Number: 111325-127 (021100)

Botanic Information:

Publication Information:

Suggested Figure for Publication -

Suggested Classification -

Suggested Technology Center -

Total Number of Drawing Sheets -

Representative Information:

practitioner(s) at Customer Number:

22204

22204

as our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Domestic Priority Information:

This is a Continuation of US application number 09/777,966, filed 2001-02-07, now GRANTED Patent 6,944,600; which is a division of 08/967,084 A1 filed November 10, 1997 Patent 6,236,971 A1, which is a continuation of 08/344,760 A1 November 23, 1994 ABANDONED.

Foreign Priority Information:

Assignee Information:

Assignee 1:

Organization Name: CONTENTGUARD HOLDINGS, INC.

Address-1 of Mailing Address: 103 Foulk Road

Address-2 of Mailing Address: Suite 200-M

City of Mailing Address: Wilmington

State of Mailing Address: DE

Postal Code of Mailing Address: 19803

Country of Mailing Address: US



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/773,306

02/09/2004

Mark J. Stefik

111325-127

6652

22204

7590

04/17/2006

NIXON PEABODY, LLP

401 9TH STREET, NW

SUITE 900

WASHINGTON, DC 20004-2128

EXAMINER

REAGAN, JAMES A

ART UNIT

PAPER NUMBER

3621

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/773,306	Applicant(s) STEFIK ET AL.	
	Examiner James A. Reagan	Art Unit 3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. This action is in response to the application filed on 29 February 2004.
2. Claims 1-39 have been examined.

Information Disclosure Statement

3. The Information Disclosure Statements filed on 14 October 2005, and on 16 June 2005 have been considered. Initialed copies of the Form 1449 are enclosed herewith.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Perritt "Knowbots, Permissions Headers and Contract Law" (30 April 1993).

Examiner's Note: The Examiner has pointed out particular references contained in the prior art of record within the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Claims 1-39:

Perritt discloses a Digital Rights Management System (page 3, bottom), levels of permission for copying, distributing, and deriving digital works (page 1, middle), servers and a network of servers (page 3, top), encryption of content (page 4, top), cost/pricing and multiple levels of pricing (page 4m middle, bottom), and rendering of digital files (page 16, bottom).

Art Unit: 3621

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **James A. Reagan** whose telephone number is **571.272.6710**. The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **James Trammell** can be reached at **571.272.6712**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> . Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

571-273-8300 [Official communications, After Final communications labeled "Box AF"]

571-273-8300 [Informal/Draft communications, labeled "PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to the **United States Patent and Trademark Office Customer Service Window**:

Randolph Building

401 Dulany Street

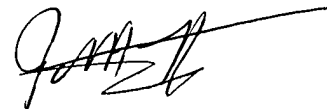
Alexandria, VA 22314.

JAMES A. REAGAN

Primary Examiner

Art Unit 3621

06 April 2006



**JAMES A. REAGAN
PRIMARY EXAMINER**

Notice of References Cited	Application/Control No. 10/773,306	Applicant(s)/Patent Under Reexamination STEFIK ET AL.	
	Examiner James A. Reagan	Art Unit 3621	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

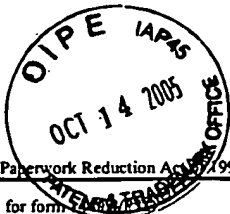
FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Perritt, Henry H. "Knowbots, Permissions Headers and Contract Law" (30 April 1993)
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

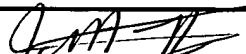
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	10/773,306
		Filing Date	February 9, 2004
		First Named Inventor	Mark J. STEFIK, et al.
		Art Unit	2131
		Examiner Name	Not Yet Assigned
Sheet 1	of 1	Attorney Docket Number	11:1325-127 (021100)

U.S. PATENT DOCUMENTS						
Examiner Initials [*]	Cite No. ¹	U.S. Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)				
JAL		6,135,646		October 24, 2000	Kahn et al.	

FOREIGN PATENT DOCUMENTS							
Examiner Initials [*]	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ³
		Country Code ³ Number ⁴	Kind Code ² (if known)				

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials [*]	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ³

Examiner Signature		Date Considered	05 APRIL 2005 [*]
-----------------------	---	--------------------	----------------------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 10

Complete if Known

Application Number	10/773,306
Filing Date	February 9, 2004
First Named Inventor	Mark J. STEFIK, et al.
Art Unit	2131
Examiner Name	Not Yet Assigned
Attorney Docket Number	111325-127 (021100)

U.S. PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	U.S. Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)				
JML		US-3,263,158		07/01/1996	Janis	
		US-3,609,697		09/28/1971	Blevins et al.	
		US-3,790,700		02/05/1974	Callais et al.	
		US-3,798,605		03/19/1974	Feistel	
		US-4,159,468		06/26/1979	Barnes et al.	
		US-4,220,991		09/02/1980	Hamano et al.	
		US-4,278,837		07/14/1981	Best	
		US-4,323,921		04/06/1982	Guillou	
		US-4,442,486		04/10/1984	Mayer	
		US-4,529,870		07/16/1985	Chaum	
		US-4,558,176		12/10/1985	Arnold et al.	
		US-4,593,376		06/03/1986	Volk	
		US-4,614,861		09/30/1986	Pavlov et al.	
		US-4,644,493		02/17/1987	Chandra et al.	
		US-4,658,093		04/14/1987	Hellman	
		US-4,713,753		12/15/1987	Beobert et al.	
		US-4,796,220		01/03/1989	Wolfe	
		US-4,817,140		03/28/1989	Chandra et al.	
		US-4,827,508		05/02/1989	Shear	
		US-4,868,376		09/19/1989	Lessin et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ²	Number ²	Kind Code ³ (if known)			
		0 084 441	EP	07/27/1983	TABS LIMITED		
		0 180 460	EP	05/07/1986	SONY CORPORATION		
		0 332 707	EP	09/01/1989	HONDA GIKEN KOGYO KABUSHIKI KAISHA		
		0 538 216 A1	EP	04/21/1993	TELEVERKET		
		0 651 554	EP	05/03/1995	EASTMAN KODAK CO.		
		0 668 695	EP	08/23/1995	VICTOR COMPANY OF JAPAN LIMITED		
		0 725 376	EP	08/07/1996	SONY CORP.		
		2 136 175	GB	09/12/1984	ATALLA CORP.		
		2 236 604	GB	04/10/1991	SUN MICROSYSTEMS INC		
		0 715 241	JP	06/05/1996	MITSUBISHI CORP.		
		04-369068	JP	12/21/1992	CHIYUUBU NIHON DENKI SOFUTOEUA KK		Abst

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, et al.
				Art Unit	2131
				Examiner Name	Not Yet Assigned
Sheet	2	of	10	Attorney Docket Number	111325-127 (021100)

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)				
pm		US-4,882,752		11/21/1989	Lindman et al.	
		US-4,891,838		01/02/1990	Faber	
		US-4,924,378		05/08/1990	Hershey et al.	
		US-4,932,054		06/05/1990	Chou et al.	
		US-4,937,863		06/26/1990	Robert et al.	
		US-4,949,187		08/14/1990	Cohen	
		US-4,953,209		08/28/1990	Ryder, Sr. et al.	
		US-4,961,142		10/02/1990	Elliott et al.	
		US-4,975,647		12/04/1990	Downer et al.	
		US-4,977,594		12/11/1990	Shear	
		US-4,999,806		03/12/1991	Chernow et al.	
		US-5,010,571		04/23/1991	Katznelson	
		US-5,014,234		05/07/1991	Edwards, Jr.	
		US-5,023,907		06/11/1991	Johnson et al.	
		US-5,047,928		09/10/1991	Wiedemer	
		US-5,050,213		09/17/1991	Shear	
		US-5,052,040		09/24/1991	Preston et al.	
		US-5,058,164		10/15/1991	Elmer et al.	
		US-5,103,476		04/07/1992	Waite et al.	
		US-5,113,519		05/12/1992	Johnson et al.	
	US-5,136,643		08/04/1992	Fischer		

FOREIGN PATENT DOCUMENTS							
Examiner Initials ²	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³	Number ⁴ Kind Code ⁵ (if known)				
		05-268415	JP	10/15/1993	RICOH CO LTD		Abst
		06-175794	JP	06/24/1994	FUJI XEROX CO LTD		Abst
		06-215010	JP	08/05/1994	SONY CORP.		Abst
		07-084852	JP	03/31/1995	HITACHI LTD.		Abst
		07-200317	JP	08/04/1995	TOSHIBA CORP.		Abst
		07-244639	JP	09/19/1995	FUJITSU LTD		Abst
		62-241061	JP	10/21/1987	NEC CORP.		Abst
		64-068835	JP	03/14/1989	RYOICHI MORI		Abst
		WO 01/63528	PCT	08/30/2001	IPDN COPR.		
✓		WO 92/20022	PCT	11/12/1992	DIGITAL EQUIPMENT CORP.		

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/773,306
		Filing Date	February 9, 2004
		First Named Inventor	Mark J. STEFIK, et al.
		Art Unit	2131
		Examiner Name	Not Yet Assigned
Sheet	3	of	10
		Attorney Docket Number	111325-127 (021100)

U.S. PATENT DOCUMENTS							
Examiner Initials [*]	Cite No. ¹	U.S. Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number - Kind Code ² (if known)					
gatl		US-5,138,712		08/11/1992	Corbin		
		US-5,146,499		09/08/1992	Geffrotin		
		US-5,148,481		09/15/1992	Abraham et al.		
		US-5,159,182		10/27/1992	Eisele		
		US-5,183,404		02/02/1993	Aldous et al.		
		US-5,191,193		03/02/1993	Le Roux		
		US-5,224,163		06/29/1993	Gasser et al.		
		US-5,204,897		04/20/1993	Wyman		
		US-5,222,134		06/22/1993	Waite et al.		
		US-5,229,263		03/29/1994	Beller et al.		
		US-5,235,642		08/10/1993	Wobber et al.		
		US-5,247,575		09/21/1993	Sprague et al.		
		US-5,255,106		10/19/1993	Castro		
		US-5,260,999		11/09/1993	Wyman		
		US-5,263,157		11/16/1993	Janis		
		US-5,263,158		11/16/1993	Janis		
		US-5,276,444		01/04/1994	McNair		
		US-5,276,735		01/04/1994	Boebert et al.		
		US-5,291,596		03/01/1994	Mita		
		US-5,301,231		04/05/1994	Abraham et al.		
		US-5,311,591		05/10/1994	Fischer		
		US-5,319,705		06/07/1994	Halter et al.		
FOREIGN PATENT DOCUMENTS							
Examiner Initials [*]	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³ Number ⁴	Kind Code ² (if known)				
		WO 93/01550	PCT	01/21/1993	INFOLOGIC SOFTWARE, INC		
		WO 94/01821	PCT	01/20/1994	SECURE COMPUTING CORP.		
		WO 96/24092	PCT	08/08/1996	BENSON, Greg		
		WO 97/48203	PCT	12/18/1997	INTEL CORP.		
		WO 98/11690	PCT	03/19/1998	GLOVER, John J.		
		WO 98/42098	PCT	09/24/1998	CRYPTOWORKS, INC.		
		WO 99/49615	PCT	09/30/1999	MICROTOME		
Examiner Signature					Date Considered		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, et al.
				Art Unit	2131
				Examiner Name	Not Yet Assigned
Sheet	4	of	10	Attorney Docket Number	111325-127 (021100)

U.S. PATENT DOCUMENTS					
Examiner Initials [*]	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
g/m		US-5,337,357	08/09/1994	Chou et al.	
		US-5,339,091	08/16/1994	Yamazaki et al.	
		US-5,341,429	08/23/1994	Stringer et al.	
		US-5,347,579	09/13/1994	Blandford	
		US-5,381,526	01/10/1995	Ellson	
		US-5,394,469	02/28/1995	Nagel et al.	
		US-5,410,598	04/25/1995	Shear	
		US-5,412,717	05/02/1995	Fischer	
		US-5,428,606	06/27/1995	Moskowitz	
		US-5,432,849	07/11/1995	Johnson et al.	
		US-5,438,508	08/01/1995	Wyman	
		US-5,444,779	08/22/1995	Daniele	
		US-5,453,601	09/26/1995	Rosen	
		US-5,455,953	10/03/1995	Russell	
		US-5,457,746	10/10/1995	Dolphin	
		US-5,473,687	12/05/1995	Lipscomb et al.	
		US-5,473,692	12/05/1995	Davis	
		US-5,499,298	03/12/1996	Narasimhalu et al.	
	US-5,502,766	03/26/1996	Boebert et al.		
	US-5,504,814	04/02/1996	Miyahara		

FOREIGN PATENT DOCUMENTS						
Examiner Initials [*]	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³	Number ⁴ Kind Code ² (if known)			

Examiner Signature	Date Considered
-----------------------	--------------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/773,306
		Filing Date	February 9, 2004
		First Named Inventor	Mark J. STEFIK, <i>et al.</i>
		Art Unit	2131
Examiner Name	Not Yet Assigned		
Attorney Docket Number	111325-127 (021100)		
Sheet	5	of	10

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
J/STP		US-5,504,818	04/02/1996	Okano	
		US-5,504,837	04/02/1996	Griffeth et al.	
		US-5,509,070	04/16/1996	Schull	
		US-5,530,235	06/25/1996	Stefik et al.	
		US-5,532,920	07/02/1996	Hartrick et al.	
		US-5,534,975	07/09/1996	Stefik et al.	
		US-5,539,735	07/23/1996	Moskowitz	
		US-5,563,946	10/08/1996	Cooper et al.	
		US-5,568,552	10/22/1996	Davis	
		US-5,621,797	04/15/1997	Rosen	
		US-5,629,980	05/13/1997	Stefik et al.	
		US-5,633,932	05/27/1997	Davis et al.	
		US-5,634,012	05/27/1997	Stefik et al.	
		US-5,638,443	06/10/1997	Stefik et al.	
		US-5,649,013	07/15/1997	Stuckey et al.	
		US-5,655,077	08/05/1997	Jones et al.	
		US-5,708,717	01/13/1998	Alasia	
		US-5,734,823	03/31/1998	Saigh et al.	
		US-5,734,891	03/31/1998	Saigh	
		US-5,737,413	04/07/1998	Akiyama et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³	Number ⁴	Kind Code ² (if known)		

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known		
				Application Number	10/773,306	
Sheet		6	of	10	Filing Date	February 9, 2004
					First Named Inventor	Mark J. STEFIK, et al.
					Art Unit	2131
					Examiner Name	Not Yet Assigned
					Attorney Docket Number	111325-127 (021100)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
GPP <					

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³	Number ⁴ Kind Code ² (if known)			

Examiner Signature	Date Considered
-----------------------	--------------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/773,306
		Filing Date	February 9, 2004
		First Named Inventor	Mark J. STEFIK, et al.
		Group Art	2131
		Examiner Name	Not Yet Assigned
Sheet 7 of 10	Attorney Docket Number	111325-127 (021100)	

U.S. PATENT DOCUMENTS					
Examiner Initials [*]	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
JMT		US-6,115,471	09/05/2000	Oki et al.	
		US-6,138,119	10/24/2000	Hall et al.	
		US-6,157,721	12/05/2000	Shear et al.	
		US-6,185,683	02/06/2001	Ginter et al.	
		US-6,226,618	05/01/2001	Downs et al.	
		US-6,233,684	05/15/2001	Stefik et al.	
		US-6,237,786	05/29/2001	Ginter et al.	
		US-6,240,185	05/29/2001	Van Wie et al.	
		US-6,253,193	06/26/2001	Ginter et al.	
		US-6,266,618	05/01/2001	Downs, et al.	
		US-6,292,569	09/18/2001	Shear et al.	
		US-6,301,660	10/09/2001	Benson	
		US-6,327,652	12/04/2001	England et al.	
		US-6,330,670	12/11/2001	England et al.	
		US-6,345,256	02/05/2002	Milsted et al.	
		US-6,363,488	05/26/2002	Ginter et al.	
		US-6,389,402	05/14/2002	Ginter et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials [*]	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ² Number ³ Kind Code ² (if known)				

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, <i>et al.</i>
				Art Unit	2131
				Examiner Name	Not Yet Assigned
Sheet	8	of	10	Attorney Docket Number	111325-127 (021100)

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
<i>ma</i>		'National Semiconductor and EPR Partner for Information Metering/Data Security Cards' March 4, 1994, Press Release from Electronic Publishing Resources, Inc.	
		Weber, R., "Digital Rights Management Technology" October 1995	
		Flasche, U. et al., "Decentralized Processing of Documents", pp. 119-131, 1986, Comput. & Graphics, Vol. 10, No. 2	
		Mori, R. et al., "Superdistribution: The Concept and the Architecture", pp. 1133-1146, 1990. The Transactions of the IEICE, Vo. E 73, No. 7, Tokyo, JP	
		Weber, R., "Metering Technologies for Digital Intellectual Property", pp. 1-29, Oct. 1994, A Report to the International Federation of Reproduction Rights Organizations	
		Clark, P.C. et al., "Bits: A Smartcard protected Operating System", pp. 66-70 and 94, November 1994, Communications of the ACM, Vol. 37, No. 11	
		Ross, P.E., "Data Guard", pp. 101, June 6, 1994, Forbes	
		Saigh, W.K., "Knowledge is Sacred", 1992, Video Pocket/Page Reader Systems, Ltd.	
		Kahn, R.E., "Deposit, Registration and Recordation in an Electronic Copyright Management System", pp. 1-19, August 1992, Corporation for National Research Initiatives, Virginia	
		Hilts, P. et al., "Books While U Wait", pp. 48-50, January 3, 1994, Publishers Weekly	
<i>✓</i>		Strattner, A., "Cash Register on a Chip may Revolutionize Software Pricing and Distribution; Wave Systems Corp.", pp. 1-3, April 1994, Computer Shopper, Vol. 14, No. 4, ISSN 0886-0556	

Examiner Signature	Date Considered
--------------------	-----------------

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, <i>et al.</i>
				Art Unit	2131
				Examiner Name	Not Yet Assigned
Sheet	9	of	10	Attorney Docket Number	111325-127 (021100)

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials [*]	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
mm		O'Conner, M., "New Distribution Option for Electronic Publishers; iOpener Data Encryption and Metering System for CD-ROM use; Column", pp. 1-6, March 1994, CD-ROM Professional, Vol. 7, No. 2, ISSN: 1409-0833	
		Willett, S., "Metered PCs: Is Your System Watching You? Wave System beta tests new technology", pp. 84, May 2, 1994, InfoWorld	
		Linn, R., "Copyright and Information Services in the Context of the National Research and Education Network", pp. 9-20, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Perrit, Jr., H., "Permission Headers and Contract Law", pp. 27-48, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Upthegrove, L., "Intellectual Property Header Descriptors: A Dynamic Approach", pp. 63-66, January 1994, IMA Intellectual Property Proceedings, Vol. 1, Issue 1	
		Sirbu, M., "Internet Billing Service Design and prototype Implementation", pp. 67-80, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Simmell, S. et al., "Metering and Licensing of Resources: Kala's General Purpose Approach", pp. 81-110, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Kahn, R., "Deposit, Registration and Recordation in an Electronic Copyright Management System", pp. 111-120, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Tygar, J. et al., "Dyad: A System for Using Physically Secure Coprocessors", pp. 121-152, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Griswold, G., "A Method for Protecting Copyright on Networks", pp. 169-178, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, et al.
				Art Unit	2131
				Examiner Name	Not Yet Assigned
Sheet	10	of	10	Attorney Docket Number	111325-021100)

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
mm		Nelson, T., "A Publishing and Royalty Model for Networked Documents", pp. 257-259, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Robinson, E., "Redefining Mobile Computing", pp. 238-240, 247-248 and 252, July 1993, PC Computing	
		Abadi, M. et al., "Authentication and Delegation with Smart-cards", PP. 1-24, 1990, Research Report DEC Systems Research Center	
		Mark Stefik, "Letting Loose the Light: Igniting Commerce in Electronic Publication", pp. 219-253, 1996, Internet Dreams: Archetypes, Myths, and Metaphors, IDSN 0-262-19373-6	
		Mark Stefik, "Letting Loose the Light: Igniting Commerce in Electronic Publication", pp. 2-35, February 8, 1995, Internet Dreams: Archetypes, Myths and Metaphors.	
		Henry H. Perritt, Jr., "Technological Strategies for Protecting Intellectual Property in the Networked Multimedia Environment", April 2-3, 1993, Knowbots, Permissions Headers & Contract Law	

Examiner Signature		Date Considered	05 APR 06
--------------------	---	-----------------	-----------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

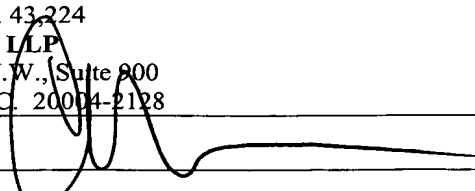
¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

1750
4

<p style="text-align: center;">TRANSMITTAL FORM (to be used for all correspondence after initial filing)</p> <p style="text-align: center;">O I P E JUN 27 2006 PATENT AND TRADEMARK OFFICE</p>		Application Number	10/773,306
		Filing Date	February 9, 2004
		First Named Inventor	Mark J. STEFIK, et al.
		Group Art Unit	3621
		Examiner Name	James A. Reagan
		Attorney Docket Number	111325-021100 (127)
For <u>1</u> Page(s) in This Submission		Confirmation Number	6652

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment / Reply <input checked="" type="checkbox"/> Amendment <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Form PTO-1449 w/3 refs. <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Declaration and Power of Attorney <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Application Data Sheet <input type="checkbox"/> Request for Corrected Filing Receipt with Enclosures <input type="checkbox"/> A self-addressed prepaid postcard for acknowledging receipt <input type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks		<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees required or credit any overpayments to Deposit Account No. 19-2380 for the above identified docket number.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Carlos R. Villamar Registration No. 43,224 Nixon Peabody LLP 401 9 th Street, N.W., Suite 800 Washington, D.C. 20004-2128
Signature	
Date	June 27, 2006

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]	
I hereby certify that this correspondence is being:	
<input type="checkbox"/> deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop _____, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450	
<input type="checkbox"/> transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) _____.	
Date	Signature
Typed or printed name	

FEE TRANSMITTAL FOR FY 2005

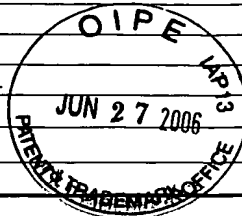
Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT **\$ 8,400.00**

Complete if Known

Application Number 10/773,306
Filing Date February 9, 2004
First Named Inventor Mark J. STEFIK, et al.
Examiner Name James A. Reagan
Art Unit 3621
Attorney Docket No. 111325-021100 (127)



METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number 19-2380

Deposit Account Name Nixon Peabody LLP

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
1001	300	2001	150	Utility filing fee	
1002	200	2002	100	Design filing fee	
1003	200	2003	100	Plant filing fee	
1004	300	2004	150	Reissue filing fee	
1005	200	2005	100	Provisional filing fee	

SUBTOTAL (1) (\$ 0)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
167	-39** = 128	X 50.00 =	6,400.00
Independent Claims 17	-7** = 10	X 200 =	2,000.00
Multiple Dependent	X	=	0

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1202	50	2202	25	Claims in excess of 20
1201	200	2201	100	Independent claims in excess of 3
1203	360	2203	180	Multiple dependent claim, if not paid
1204	200	2204	100	** Reissue independent claims over original patent
1205	50	2205	25	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) \$ 8,400.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1051	130	2051	65	Surcharge - late filing fee or oath
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet
1053	130	1053	130	Non-English specification
1812	2,520	1812	2,520	For filing a request for ex parte reexamination
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action
1251	120	2251	60	Extension for reply within first month
1252	450	2252	225	Extension for reply within second month
1253	1,020	2253	510	Extension for reply within third month
1254	1,590	2254	795	Extension for reply within fourth month
1255	2,160	2255	1,080	Extension for reply within fifth month
1401	500	2401	250	Notice of Appeal
1402	500	2402	250	Filing a brief in support of an appeal
1403	1,000	2403	500	Request for oral hearing
1451	1,510	1451	1,510	Petition to institute a public use proceeding
1452	500	2452	250	Petition to revive - unavoidable
1453	1,500	2453	750	Petition to revive - unintentional
1501	1,400	2501	700	Utility issue fee (or reissue)
1502	800	2502	400	Design issue fee
1503	1,100	2503	550	Plant issue fee
1460	130	1460	130	Petitions to the Commissioner
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)
1806	180	1806	180	Submission of Information Disclosure Stmt
8021	40	8021	40	Recording each patent assignment per property (times number of properties)
1809	790	2809	395	Filing a submission after final rejection (37 CFR 1.129(a))
1810	790	2810	395	For each additional invention to be examined (37 CFR 1.129(b))
1801	790	2801	395	Request for Continued Examination (RCE)
1802	900	1802	900	Request for expedited examination of a design application

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]

I hereby certify that this correspondence is being:

- ☐ deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop _____, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450
- ☐ transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) _____

Date

Signature

Typed or printed name

SUBMITTED BY

Name (Print/Type) Carlos R. Villamar
Signature

Registration No. 43,224
(Attorney/Agent)

Complete (if applicable)

Telephone (202) 585-8204
Date June 27, 2006

SEND TO: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450



- 1 -

Docket No. 111325-021100 (127)
Serial No. 10/773,306

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	)	Confirmation No.: 6652
Mark J. STEFIK, <i>et al.</i>	)	Group Art Unit: 3621
Serial No. 10/773,306	)	Examiner: Reagan, James A
Filed: February 9, 2004)	
For: SYSTEM FOR CONTROLLING THE)	
DISTRIBUTION AND USE OF)	
DIGITAL WORKS UTILIZING)	
DIGITAL TICKETS)	

U.S. Patent and Trademark Office
Customer Window, Mail Stop Non-Fee Amendment
Randolph Building
401 Dulany Street
Alexandria, VA 22314

AMENDMENT

Sir:

In response to the non-final Office Action mailed **April 17, 2006**, the below amendments and following remarks are submitted in connection with the above-identified application.

06/29/2006 MBEYENE1 00000030 192300 10773306
01 FC:1202 6400.00 DA
02 FC:1201 2000.00 DA

Amendments to the Claims:

1-7. (Cancelled)

8. (Currently amended) A method for controlling the rendering of digital content comprising:

storing digital content and usage rights information associated with the digital content in a repository,

said usage rights information specifying a manner by which the digital content can be rendered;

receiving requests for stored digital content and, in response thereto, causing a requested digital content and the associated usage rights information to be transmitted to the requester over a communications medium; and

enforcing usage of the digital content in accordance with the usage rights information,

~~whereby~~ wherein the requested digital content cannot be rendered by the requester in the absence of a rights enforcement ~~architecture~~ mechanism, and ~~whereby~~

rendering of the requested digital content by the requester is only in accordance with the usage rights information.

9. (Currently amended) The method ~~according to~~ as recited in claim 8, wherein said storing step comprises storing the usage rights information on the same storage medium as the digital content.

10. (Currently amended) The method ~~according to~~ as recited in claim 8, wherein said storing step comprises storing the usage rights information on a storage medium separate from a storage medium on which the digital content is stored.

11. (Currently amended) The method ~~according to~~ as recited in claim 8, wherein the usage rights information includes conditions that must be satisfied in order to permit rendering of the digital content.

12. (Currently amended) The method ~~according to~~ as recited in claim 8, wherein the usage rights information includes fee information.

13. (Currently amended) The method ~~according to~~ as recited in claim 8, wherein the usage rights information specifies circumstances under which the digital content can be rendered.

14. (Currently amended) The method ~~according to~~ as recited in claim 11, wherein the conditions include a fee to be collected in connection with the rendering of the digital content.

15. (Currently amended) A computer-readable medium having stored thereon computer-executable instructions for controlling rendering of digital content, the instructions comprising:

instructions for storing ~~encrypted~~ digital content in a first repository;

instructions for associating with the digital content usage rights information specifying a manner by which the digital content can be rendered;

instructions for receiving a request ~~from a requester~~ for the digital content; ~~[[and]]~~

instructions for causing the requested digital content and the usage rights information to be transmitted from the first repository to ~~the requester~~ a second repository in response to the request for the digital content; and

instructions for enforcing rendering of the digital content in accordance with the usage rights information.

wherein the requested digital content cannot be rendered by the second repository in the absence of a rights enforcement mechanism, and

rendering of the requested digital content by the requester is only in accordance with the usage rights information.

16. (Cancelled)

17. (Original) The computer-readable medium of claim 15, wherein the usage rights information specifies a condition that must be satisfied in order for the requester to render the digital content.

18. (Currently amended) The computer-readable medium of claim 17, wherein the condition ~~includes~~ comprises a fee to be collected in connection with the rendering of the digital content.

19. (Currently amended) A method of rendering digital content having usage rights information associated therewith, the usage rights information specifying a manner by which the digital content can be rendered, the method comprising:

receiving the digital content;

receiving the usage rights information associated with the digital content;

receiving a request to render the digital content;

determining, based on the usage rights information associated with the digital content, whether the content can be rendered in accordance with the request; [[and]]

rendering the digital content in accordance with the request only if it is determined that the content can be rendered in accordance with the request; and

denying the request and preventing rendering of the digital content if it is determined that the digital content cannot be rendered in accordance with the request.

20. (Original) The method of claim 19, wherein the usage rights information is stored on the same storage medium as the digital content.

21. (Original) The method of claim 19, wherein the usage rights information is stored on a storage medium that is separate from a storage medium on which the digital content is stored.

22. (Original) The method of claim 19, further comprising:

determining based on the usage rights information a fee to be collected in connection with rendering the digital content; and

collecting the fee prior to said rendering step.

23. (Original) The method of claim 22, wherein said step of collecting the fee comprises creating a debit against a user account.

24. (Original) The method of claim 23, wherein said step of collecting the fee further comprises reporting the debit to a clearinghouse.

25. (Original) The method of claim 22, further comprising the step of obtaining credit information relating to a user from a credit agency prior to collecting the fee.

26-32. (Cancelled)

33. (Currently amended) The method of ~~claim 26~~ claim 22, wherein the usage rights information specifies a fee to be collected as a condition to rendering the digital content, and

wherein said denying step is based at least in part on non-payment of ~~[[the]]~~ a monetary amount of the fee as determined in said determining step.

34. (Currently amended) A computer-readable medium having stored thereon computer-executable instructions for rendering digital content having usage rights information associated therewith and specifying how the digital content can be rendered, the medium comprising:

instructions for receiving the digital content;

instructions for receiving the usage rights information associated with the digital content;

instructions for receiving a request to render the digital content;

instructions for determining, based on the usage rights information associated with the digital content, whether the digital content can be rendered in accordance with the request; ~~[[and]]~~

instructions for rendering the digital content in accordance with the request only if it is determined that the content can be rendered in accordance with the request; and
instructions for denying the request if the usage rights information does not indicate that the digital content can be rendered in accordance with the request.

35. (Cancelled)

36. (Currently amended) The computer-readable medium of ~~claim 35~~ claim 34, further comprising:

instructions for determining, based on the usage rights information, a fee to be collected in connection with rendering the digital content; and
instructions for collecting the fee.

37. (Currently amended) A system for controlling rendering of digital content having usage rights information associated therewith, said system comprising:

a rendering system which issues a request to render the digital content; and
a ~~rights~~ repository which:

receives the digital content, the usage rights information associated with the digital content, and the request to render the digital content,

examines the usage rights information associated with the digital content, ~~[and]~~

~~grants or denies~~ the request to render the digital content ~~based on whether~~ if the rights information permits rendering of the digital content in accordance with the request, and

denies the request to render the digital content if the rights information does not permit rendering of the digital content in accordance with the request.

38. (Currently amended) The system of claim 37, wherein the usage rights information ~~includes~~ comprises a condition and wherein the rights repository grants or denies the request based at least in part on whether the condition is satisfied.

39. (Original) The system of claim 38, wherein the condition comprises a requirement that a fee be collected prior to rendering the digital content, and wherein the rights repository ensures that payment has been collected prior to granting a request to render the digital content.

40. (New) The method of claim 19, wherein the steps of receiving the digital content, receiving the usage rights information associated with the digital content, and receiving the request to render the digital content are performed relatively in any temporal order.

41. (New) The computer-readable medium of claim 34, wherein the instructions for receiving the digital content, receiving the usage rights information associated with the digital content, and receiving the request to render the digital content are performed relatively in any temporal order.

42. (New) The system of claim 37, wherein the digital content, the usage rights information associated with the digital content, and the request to render the digital content are received relatively in any temporal order.

43. (New) The computer-readable medium of claim 34, wherein the instructions for receiving the digital content comprise instructions for receiving the digital content from a storage medium.

44. (New) The computer-readable medium of claim 43, wherein the storage medium is part of the computer-readable medium.

45. (New) The computer-readable medium of claim 34, wherein the instructions for receiving the usage rights information associated with digital content include instructions for loading the usage rights information associated with digital content from the computer-readable medium.

46. (New) The computer-readable medium of claim 15, wherein the usage rights information is embodied in software instructions which implement use privileges for the usage rights information.

47. (New) The computer-readable medium of claim 34, wherein the usage rights information is embodied in software instructions which implement use privileges for the usage rights information.

48. (New) A method of rendering digital content having usage rights information associated therewith, the usage rights information specifying a manner by which the digital content can be rendered, said method comprising:

establishing trust for receiving the digital content;

receiving the digital content;

receiving a request to render the digital content;

determining, based on the usage rights information associated with the digital content, whether the content can be rendered in accordance with the request;

rendering the digital content in accordance with the request only if it is determined that the content can be rendered in accordance with the request; and

denying the request and preventing rendering of the digital content if it is determined that the digital content cannot be rendered in accordance with the request.

49. (New) The method as recited in claim 8, further comprising:

authorizing the repository for using the digital content, wherein the digital content can be used only by an authorized repository, the step of authorizing the repository comprising:

making a request for an authorization object required to be included within the repository to use the digital content;

determining whether the request for an authorization object should be granted; and

transmitting the authorization object to the repository if it is determined that the request should be granted.

50. (New) The computer readable medium as recited in claim 15, further comprising:

instructions for authorizing the repository for using the digital content, wherein the digital content can be used only by an authorized repository, the instructions for authorizing the repository comprising:

instructions for making a request for an authorization object required to be included within the repository to use the digital content; and

instructions for receiving the authorization object if it is determined that the request should be granted.

51. (New) The method as recited in claim 19, further comprising:

authorizing a repository for using the digital content, wherein the digital content can be used only by an authorized repository, the step of authorizing the repository comprising:

making a request for an authorization object required to be included within the repository to use the digital content;

determining whether the request for an authorization object should be granted; and

transmitting the authorization object to the repository if it is determined that the request should be granted.

52. (New) The computer readable medium as recited in claim 34, further comprising:

instructions for authorizing a repository for using the digital content, wherein the digital content can be used only by an authorized repository, the instructions for authorizing the repository comprising:

instructions for making a request for an authorization object required to be included within the repository to use the digital content; and

instructions for receiving the authorization object if it is determined that the request should be granted.

53. (New) The system as recited in claim 37, further comprising:

means for authorizing the repository for making the digital content available for use, wherein the digital content can be made available for use only by an authorized repository, the means for authorizing the repository comprising:

means for making a request for an authorization object required to be included within the repository to make the digital content available for use;

means for determining whether the request for an authorization object should be granted; and

means for transmitting the authorization object to the repository if it is determined that the request should be granted.

54. (New) The method as recited in claim 48, wherein said step of establishing trust comprises authorizing a repository for using the digital content, wherein the digital content can be used only by an authorized repository, the step of authorizing the repository comprising:

making a request for an authorization object required to be included within the repository to use the digital content;

determining whether the request for an authorization object should be granted; and

transmitting the authorization object to the repository if it is determined that the request should be granted.

55. (New) The method as recited in claim 8, further comprising:

requesting access to the digital content stored in the repository;

determining whether the repository is permitted to transmit the digital content specified by the request; and

transmitting the digital content to a second repository only if the repository is permitted to transmit the digital content.

56. (New) The computer readable medium as recited in claim 15, further comprising:

instructions for receiving requests to transport the digital content stored in the repository;

instructions for determining whether the repository is permitted to transport the digital content specified by the request; and

instructions for transporting the digital content to a second repository only if the repository is permitted to transport the digital content.

57. (New) The method as recited in claim 19, further comprising:

requesting to transport the digital content;

determining whether the repository is permitted to transport the digital content specified by the request; and

transporting the digital content to a second repository only if the repository is permitted to transport the digital content.

58. (New) The computer readable medium as recited in claim 34, further comprising:

instructions for receiving a request to transport the digital content;

instructions for determining whether the repository is permitted to transport the digital content specified by the request; and

instructions for transporting the digital content to a second repository only if the repository is permitted to transport the digital content.

59. (New) The system as recited in claim 37, further comprising:

means for receiving a request to transport the digital content stored in the repository;

means for determining whether the repository is permitted to transport the digital content specified by the request; and

means for transporting the digital content to a second repository only if the repository is permitted to transport the digital content.

60. (New) The method as recited in claim 48, further comprising:

requesting to transport the digital content;

determining whether the repository is permitted to transport the digital content specified by the request; and

transporting the digital content to a second repository only if the repository is permitted to transport the digital content.

61. (New) An apparatus for rendering digital content in accordance with rights that are enforced by the apparatus, said apparatus comprising:

a rendering engine configured to render digital content;

a storage for storing the digital content;

means for requesting use of the digital content stored in the storage; and

a repository coupled to the rendering engine,

wherein the repository includes:

means for processing a request from the means for requesting,

means for checking whether the request is for a permitted rendering of the digital content in accordance with rights specified in the apparatus, and

means for processing the request to make the digital content available to the rendering engine for rendering if the request is for a permitted rendering of the digital content.

62. (New) The apparatus as recited in claim 61, wherein the means for checking comprises means for comparing a requested use with a use specified by the rights.

63. (New) The apparatus as recited in claim 61 wherein the means for checking comprises means for checking if a particular key is assigned to the repository.

64. (New) The apparatus as recited in claim 61, further comprising means for requesting a transfer of the digital content from an external memory to the storage.

65. (New) The apparatus as recited in claim 61, wherein the digital content is audio content.

66. (New) The apparatus as recited in claim 65, wherein the audio content is music.

67. (New) The apparatus as recited in claim 61, wherein the digital content is video content.

68. (New) The apparatus as recited in claim 61, wherein the apparatus is a portable device.

69. (New) The apparatus as recited in claim 61, wherein the rights are provided by a provider of the digital content.

70. (New) The apparatus as recited in claim 61, wherein the means for processing comprises transmitting the digital content to the rendering engine.

71. (New) The apparatus as recited in claim 61, wherein the digital content comprises a composite digital work comprising plural digital works.

72. (New) The apparatus as recited in claim 61, wherein the rendering engine is configured to render digital content into a medium that is not further protected by rights and the request is for rendering the digital content into a medium that is not further protected by rights.

73. (New) The apparatus as recited in claim 72, wherein the medium is an optical disk.

74. (New) The apparatus as recited in claim 61, wherein the means for checking comprises checking whether a maximum number of renderings of the digital content have been made.

75. (New) The apparatus as recited in claim 61, wherein the rights are embodied in software instructions which implement the use privileges for the rights.

76. (New) The apparatus as recited in claim 61, further comprising means for authorizing the repository for making the digital content available for rendering, wherein the digital content can be made available for rendering only by an authorized repository, comprising:

means for making a request for an authorization object required to be included within the repository for the apparatus to render the digital content; and

means for receiving the authorization object if it is determined that the request should be granted.

77. (New) The apparatus as recited in claim 61, further comprising:

means for receiving requests for transporting the digital content stored in the storage;

means for determining whether a second repository is permitted to receive the digital content specified by the request; and

means for transporting the digital content to the second repository only if the second repository is permitted to receive the digital content.

78. (New) The apparatus as recited in claim 61, further comprising:

means for requesting receipt of digital content stored outside the apparatus; and

means for receiving the digital content if the apparatus is permitted to receive the digital content.

79. (New) A system for controlling use of digital content by authorizing at least one repository for making the digital content available for use wherein the digital content can be made available for use only by an authorized repository, said system comprising:

at least one repository for making a request for an authorization object required to be included within the repository for the repository to make the digital content available for use;

means for determining whether the request from the repository should be granted;
and

means for transmitting the authorization object to the repository if the means for determining determines that the request should be granted.

80. (New) The system as recited in claim 79, wherein the authorization object comprises a key from a master repository.

81. (New) The system as recited in claim 79, wherein the repository is in a portable device.

82. (New) The system as recited in claim 79, wherein the repository is in a personal computer.

83. (New) The system as recited in claim 79, wherein the means for determining comprises means for determining whether a maximum number of authorization objects have been transmitted.

84. (New) The system as recited in claim 79, further comprising means for transferring the digital content in a protected form to the repository if the repository has an authorization object.

85. (New) The system as recited in claim 79, wherein the digital content is audio content.

86. (New) The system as recited in claim 85, wherein the audio content is music.

87. (New) The system as recited in claim 79, wherein the digital content is video content.

88. (New) The system as recited in claim 79, wherein the use of the digital content is rendering of the digital content.

89. (New) The system as recited in claim 79, wherein the means for determining and the means for transmitting are embodied in a single repository.

90. (New) The system as recited in claim 79, further comprising:
means for requesting transporting of the digital content in the repository;
means for determining whether a second repository is permitted to receive the digital content specified by the request; and
means for transporting the digital content to the second repository only if the second repository is permitted to receive the digital content.

91. (New) The system as recited in claim 79, further comprising:
means for requesting transport of digital content stored outside the repository;
means for determining whether the repository is permitted to receive the digital content specified by the request; and
means for transporting the digital content stored outside the repository to the repository only if the repository is permitted to receive the digital content.

92. (New) The system as recited in claim 79, further comprising:
means for requesting rendering of the digital content in the repository;
means for determining whether a request for rendering should be granted; and
means for rendering the digital content only if the determining step determines that the request for rendering should be granted.

93. (New) A system for controlling distribution and use of digital content in accordance with rights that are enforced by a repository, said system comprising:
a storage for storing digital content;
a first repository comprising:
means for requesting access to the digital content stored in the storage, and
means for granting a manner of use of the requested digital content in accordance with rights specified for governing use of the requested digital content; and
a second repository comprising

means for determining whether the first repository is permitted to receive the digital content specified by a request from the first repository,

means for granting access to the digital content, and

means for transmitting the digital content from the storage to the first repository only if the first repository is permitted to receive the digital content.

94. (New) The system as recited in claim 93, wherein the first repository is comprised within a personal computer.

95. (New) The system as recited in claim 93, further comprising a rendering device having a rendering engine coupled with the first repository for rendering the digital content.

96. (New) The system as recited in claim 95, wherein the rendering device and the first repository are comprised within a personal computer.

97. (New) The system as recited in claim 93, wherein the means for determining comprises means for checking if the first repository has an authorization object.

98. (New) The system as recited in claim 97, wherein the authorization object comprises a key from a master repository.

99. (New) The system as recited in claim 93, wherein the digital content is audio content.

100. (New) The system as recited in claim 99, wherein the audio content is music.

101. (New) The system as recited in claim 93, wherein the digital content is video content.

102. (New) The system as recited in claim 93, wherein the means for requesting access comprises means for generating a requested manner of use of the digital content, and wherein the means for determining only grants access to the digital content if the requested manner of use corresponds to an authorized manner of use.

103. (New) The system as recited in claim 93, wherein the rights are specified by the second repository.

104. (New) The system as recited in claim 93, wherein the rights are embodied in software instructions which implement the use privileges for the rights.

105. (New) The system as recited in claim 93, wherein the first repository is coupled to a storage media, and the means for transmitting transmits the digital content from the storage to the storage media.

106. (New) The system as recited in claim 105, wherein the storage media is an optical disk.

107. (New) The system as recited in claim 105, wherein the storage media, the first repository, and the second repository are embodied in a single physical device.

108. (New) The system as recited in claim 93, wherein the digital content comprises a composite digital work comprising plural digital works.

109. (New) The system as recited in claim 95, wherein the rendering device is a portable device.

110. (New) The system as recited in claim 93, further comprising means for authorizing the first repository for making the digital content available for use, wherein the digital content can be made available for use only by an authorized repository, the means for authorizing the first repository comprising:

means for making a request for an authorization object required to be included within the repository to make the digital content available for use;

means for determining whether the request for an authorization object should be granted; and

means for transmitting the authorization object to the first repository if it is determined that the request for an authorization object should be granted.

111. (New) The system as recited in claim 93, further comprising:

means for requesting rendering of the digital content;

means for determining whether the request for rendering should be granted; and

means for rendering the digital content by the first repository only if the determining step determines that the request for rendering should be granted.

112. (New) A system for controlling distribution and use of digital content in accordance with rights that are enforced by a repository, said system comprising:

a storage for storing digital content;

a first repository comprising:

means for granting a manner of use of the requested digital content in accordance with rights specified in the system; and

a second repository comprising

means for determining whether the first repository is permitted to receive the digital content,

means for granting access to the digital content, and

means for transporting the digital content from the storage to the first repository only if the first repository is permitted to receive the digital content.

113. (New) The system as recited in claim 112, wherein the rights are provided by a provider of the digital content.

114. (New) The system as recited in claim 112, wherein the manner of use of the requested digital content is rendering of the requested digital content.

115. (New) The system recited in claim 112, wherein the means for determining comprises checking whether a maximum number of the transport of the digital content have been made.

116. (New) The system as recited in claim 112, wherein the digital content comprises a composite digital work comprising plural digital works.

117. (New) The system as recited in claim 112, wherein the rights are embodied in software instructions which implement the use privileges for the rights.

118. (New) The system as recited in claim 112, further comprising means for authorizing a repository for making the digital content available for use, wherein the digital content can be made available for use only by an authorized repository, the means for authorizing the repository comprising:

means for making a request for an authorization object required to be included within the repository to make the digital content available for use;

means for determining whether the request for an authorization object should be granted; and

means for transmitting the authorization object to the repository if it is determined that the request for an authorization object should be granted.

119. (New) The system as recited in claim 112, further comprising:

means for requesting rendering of the digital content;

means for determining whether the request for rendering should be granted; and

means for rendering the digital content by the first repository only if the determining step determines that the request should be granted.

120. (New) An apparatus for transporting digital content in accordance with rights that are enforced by said apparatus, said apparatus comprising:

means for coupling with a receiving repository to transport digital content;

a storage for storing digital content;
means for requesting a manner of use of digital content stored in the storage;
a sending repository comprising:
means for processing a request from the means for requesting,
means for checking whether the request is for a permitted transport of the digital content in accordance with rights specified in the apparatus, and
means for processing the request to make the digital content available by the means for coupling to the receiving repository if the request is for a permitted transport of the digital content.

121. (New) The apparatus recited in claim 120, wherein the sending repository further comprising means for communicating to the receiving repository that use of the digital content by the receiving repository is to be in accordance with rights specified in the apparatus of the receiving repository.

122. (New) The apparatus recited in claim 120, wherein the manner of use of the digital content is rendering of the digital content.

123. (New) The apparatus recited in claim 120, wherein the means for checking comprises checking whether a maximum number of transports of the digital content have been made.

124. (New) The apparatus as recited in claim 120, wherein the rights are provided by a provider of the digital content.

125. (New) The apparatus as recited in claim 120, wherein the digital content comprises a composite digital work comprising plural digital works.

126. (New) The apparatus as recited in claim 120, wherein the rights are embodied in software instructions which implement the use privileges for the rights.

127. (New) The apparatus as recited in claim 120, further comprising means for authorizing the sending repository for making the digital content available, wherein the digital content can be made available only by an authorized repository, the means for authorizing the sending repository comprising:

means for making a request for an authorization object required to be included within the sending repository to make the digital content available; and

means for receiving the authorization object if it is determined that the request for an authorization object should be granted.

128. (New) The apparatus as recited in claim 120, further comprising:

means for receiving requests for rendering of the digital content;

means for determining whether the request for rendering should be granted; and

means for rendering the digital content only if the determining step determines that the request should be granted and the receiving repository contains an authorization object.

129. (New) A method for controlling use of digital content in accordance with rights that are enforced by said method, said method comprising steps of:

receiving digital content and an associated authorization-ID identifying an authorization object;

receiving a request to use the digital content;

locating the authorization object based on the authorization-ID;

decrypting the authorization object;

executing a script associated with the authorization object; and

granting access to the digital content, comprising processing the digital content using the authorization object, if the executing step is completed satisfactorily.

130. (New) The method as recited in claim 129, wherein the digital content comprises a composite digital work comprising plural digital works.

131. (New) The method as recited in claim 129, wherein the request is for rendering the digital content in a medium that is not further protected by rights.

132. (New) The method as recited in claim 131 wherein the medium is an optical disk.

133. (New) The method as recited in claim 129, wherein the script comprises at least one portion for checking whether a maximum number of the uses of the digital content has not been exceeded.

134. (New) The method as recited in claim 129, wherein the script comprises at least one portion for checking whether a maximum number of the uses of a composite work comprising the digital content has not been exceeded.

135. (New) The method as recited in claim 129, wherein the authorization object comprises a key.

136. (New) The method as recited in claim 129, wherein the use of the content is rendering of the content.

137. (New) The method as recited in claim 129, wherein the use of the content is distribution of the content.

138. (New) An apparatus for controlling use of digital content in accordance with rights that are enforced by said apparatus, said apparatus comprising:

means for receiving digital content and an associated authorization-ID identifying an authorization object;

means for receiving a request to use the digital content;

means for locating the authorization object based on the authorization-ID;

means for decrypting the authorization object;

means for executing a script associated with the authorization object; and

means for granting access to the digital content, comprising processing the digital content using the authorization object, if the executing is completed satisfactorily.

139. (New) The apparatus as recited in claim 138, wherein the digital content comprises a composite digital work comprising plural digital works.

140. (New) The apparatus as recited in claim 138, wherein the request is for rendering the digital content in a medium that is not further protected by rights.

141. (New) The apparatus as recited in claim 140, wherein the medium is an optical disk.

142. (New) The apparatus as recited in claim 138, wherein the script comprises at least one portion for checking whether a maximum number of the uses of the digital content has not been exceeded.

143. (New) The apparatus as recited in claim 142, wherein the script comprises at least one portion for checking whether a maximum number of the uses of a composite work comprising the digital content has not been exceeded.

144. (New) The apparatus as recited in claim 138, wherein the authorization object comprises a key.

145. (New) The apparatus as recited in claim 138, wherein the script is part of software and/or hardware implementing the apparatus.

146. (New) The apparatus as recited in claim 138, wherein the use of the content is rendering of the content.

147. (New) The apparatus as recited in claim 138, wherein the use of the content is distribution of the content.

148. (New) A system for controlling use of digital content in accordance with rights that are enforced by said system, said system comprising:

a server component providing digital content and an associated authorization-ID identifying an authorization object;

means for receiving the digital content and the associated authorization-ID identifying the authorization object;

means for receiving a request to use the digital content;

means for locating the authorization object based on the authorization-ID;

means for decrypting the authorization object;

means for executing a script associated with the authorization object; and

means for granting access to the digital content, comprising processing the digital content using the authorization object, if the executing is completed satisfactorily.

149. (New) The system as recited in claim 148, wherein the digital content comprises a composite digital work comprising plural digital works.

150. (New) The system as recited in claim 148, wherein the request is for rendering the digital content in a medium that is not further protected by rights.

151. (New) The system as recited in claim 148, wherein the medium is an optical disk.

152. (New) The system as recited in claim 148, wherein the script comprises at least one portion for checking whether a maximum number of the uses of the digital content has not been exceeded.

153. (New) The system as recited in claim 148, wherein the script comprises at least one portion for checking whether a maximum number of the uses of a composite work comprising the digital content has not been exceeded.

154. (New) The system as recited in claim 148, wherein the authorization object comprises a key.

155. (New) The system as recited in claim 148, wherein the use of the content is rendering of the content.

156. (New) The system as recited in claim 148, wherein the use of the content is distribution of the content.

157. (New) A method for controlling use of digital content, said method comprising steps of:

receiving digital content and an associated authorization-ID identifying an authorization object;

receiving a request to use the digital content;

locating the authorization object based on the authorization-ID;

decrypting the authorization object;

performing tests associated with the authorization object; and

granting the request to access to the digital content for the use, comprising processing the digital content using the authorization object, if the tests are successful.

158. (New) The method as recited in claim 157, wherein the digital content comprises a composite digital work comprising plural digital works.

159. (New) The method as recited in claim 157, wherein the request is for rendering the digital content in a medium that is not further protected by rights.

160. (New) The method as recited in claim 157, wherein the medium is an optical disk.

161. (New) The method as recited in claim 157, wherein the step of performing tests comprises testing whether a maximum number of the uses of the digital content has not been exceeded.

162. (New) The method as recited in claim 157, wherein the means for performing tests comprises testing whether a maximum number of the uses of a composite work comprising the digital content has not been exceeded.

163. (New) The method as recited in claim 157, wherein the authorization object comprises a key.

164. (New) The method as recited in claim 157, wherein the use of the content is rendering of the content.

165. (New) The method as recited in claim 157, wherein the use of the content is distribution of the content.

166. (New) An apparatus for controlling use of digital content, said apparatus comprising:

means for receiving digital content and an associated authorization-ID identifying an authorization object;

means for receiving a request to use the digital content;

means for locating the authorization object based on the authorization-ID;

means for decrypting the authorization object;

means for performing tests associated with the authorization object; and

means for granting the request to access to the digital content for the use, comprising processing the digital content using the authorization object, if the tests are successful.

167. (New) The apparatus as recited in claim 166, wherein the digital content comprises a composite digital work comprising plural digital works.

168. (New) The apparatus as recited in claim 166, wherein the request is for rendering the digital content in a medium that is not further protected by rights.

169. (New) The apparatus as recited in claim 166, wherein the medium is an optical disk.

170. (New) The apparatus as recited in claim 166, wherein the means for performing tests comprises testing whether a maximum number of the uses of the digital content has not been exceeded.

171. (New) The apparatus as recited in claim 166, wherein the means for performing tests comprises testing whether a maximum number of the uses of a composite work comprising the digital content has not been exceeded.

172. (New) The apparatus as recited in claim 166, wherein the authorization object comprises a key.

173. (New) The apparatus as recited in claim 166, wherein the use of the content is rendering of the content.

174. (New) The apparatus as recited in claim 166, wherein the use of the content is distribution of the content.

175. (New) A system for controlling use of digital content, said system comprising:

a server component providing digital content and an associated authorization-ID identifying an authorization object;

means for receiving the digital content and the associated authorization-ID identifying the authorization object;

means for receiving a request to use the digital content;

means for locating the authorization object based on the authorization-ID;
means for decrypting the authorization object;
means for performing tests associated with the authorization object; and
means for granting the request to access to the digital content for the use,
comprising processing the digital content using the authorization object, if the tests are
successful.

176. (New) The system as recited in claim 175, wherein the digital content
comprises a composite digital work comprising plural digital works.

177. (New) The system as recited in claim 175, wherein the request is for
rendering the digital content in a medium that is not further protected by rights.

178. (New) The system as recited in claim 175, wherein the medium is an optical
disk.

179. (New) The system as recited in claim 175, wherein the means for performing
tests comprises testing whether a maximum number of the uses of the digital content has
not been exceeded.

180. (New) The system as recited in claim 175, wherein the means for performing
tests comprises testing whether a maximum number of the uses of a composite work
comprising the digital content has not been exceeded.

181. (New) The system as recited in claim 175, wherein the authorization object
comprises a key.

182. (New) The system as recited in claim 175, wherein the use of the content is
rendering of the content.

183. (New) The system as recited in claim 175, wherein the use of the content is distribution of the content.

REMARKS

The following amendments and remarks are submitted to be fully responsive to the Official Action of **April 17, 2006**. In the present amendment, claims 8-15, 18, 19, 33, 34, and 36-38 are amended, claims 1-7, 16, 26-32 and 35 are cancelled, and claims 40-183 are added. No new matter is introduced (see, e.g., FIGs. 1, 4a, 4b, 15 and 16 and discussion thereof, and ¶¶ [0402]-[0411] of Applicants' published Specification). Thus, claims 8-15, 17-25, 33, 34, and 36-183 are now pending. Reconsideration and allowance of this application are respectfully requested.

The present independent claims 8, 15, 19, 34, 37, 48, 61, 79, 93, 112, 120, 129, 138, 148, 157, 166 and 175, and the claims dependent therefrom, are patently distinguishable over *Perritt* ("Perritt Knowbots, Permissions Headers & Contract Law"), because *Perritt* fails to disclose, teach, or suggest all the features recited the claims. For example, independent claim 1 and 15, as amended, in relevant part recite:

... causing a requested digital content and the associated usage rights information to be transmitted ...; and
wherein the requested digital content cannot be rendered ... in the absence of a rights enforcement mechanism, and
rendering of the requested digital content ... only in accordance with the usage rights information;

independent claim 19 and 34, as amended, in relevant part recite:

... receiving the digital content;
... receiving the usage rights information associated with the digital content;
... determining, based on the usage rights information associated with the digital content, whether the content can be rendered in accordance with the request;
... rendering the digital content in accordance with the request only if it is determined that the content can be rendered in accordance with the request; and
... denying the request and preventing rendering of the digital content if it is determined that the digital content cannot be rendered in accordance with the request;

independent claim 37, as amended, in relevant part recites:

a rendering system which issues a request to render the digital content; and
a repository which:

receives the digital content, the usage rights information associated with the digital content, and the request to render the digital content,
examines the usage rights information associated with the digital content,
grants the request to render the digital content if the rights information permits rendering of the digital content in accordance with the request, and
denies the request to render the digital content if the rights information does not permit rendering of the digital content in accordance with the request;

independent claim 48 in relevant part recites:

establishing trust for receiving the digital content;
receiving the digital content;
receiving a request to render the digital content;
determining, based on the usage rights information associated with the digital content, whether the content can be rendered in accordance with the request;
rendering the digital content in accordance with the request only if it is determined that the content can be rendered in accordance with the request; and
denying the request and preventing rendering of the digital content if it is determined that the digital content cannot be rendered in accordance with the request;

independent claim 61 in relevant part recites:

a rendering engine configured to render digital content;
means for requesting use of the digital content stored in the storage; and
a repository coupled to the rendering engine,
wherein the repository includes:
means for processing a request from the means for requesting,
means for checking whether the request is for a permitted rendering of the digital content in accordance with rights specified in the apparatus, and
means for processing the request to make the digital content available to the rendering engine for rendering if the request is for a permitted rendering of the digital content;

independent claim 79 in relevant part recites:

at least one repository for making a request for an authorization object required to be included within the repository for the repository to make the digital content available for use;
means for determining whether the request from the repository should be granted; and

means for transmitting the authorization object to the repository
if the means for determining determines that the request should be
granted;

independent claim 93 in relevant part recites:

a first repository comprising:
means for requesting access to the digital content stored in the
storage, and
means for granting a manner of use of the requested digital
content in accordance with rights specified for governing use of the
requested digital content; and
a second repository comprising
means for determining whether the first repository is permitted
to receive the digital content specified by a request from the first
repository,
means for granting access to the digital content, and
means for transmitting the digital content from the storage to
the first repository only if the first repository is permitted to receive the
digital content;

independent claim 112 in relevant part recites:

a first repository comprising:
means for granting a manner of use of the requested digital
content in accordance with rights specified in the system; and
a second repository comprising
means for determining whether the first repository is permitted
to receive the digital content,
means for granting access to the digital content, and
means for transporting the digital content from the storage to
the first repository only if the first repository is permitted to receive the
digital content;

independent claim 120 in relevant part recites:

means for coupling with a receiving repository to transport
digital content;
means for requesting a manner of use of digital content stored
in the storage;
a sending repository comprising:
means for processing a request from the means for requesting,
means for checking whether the request is for a permitted
transport of the digital content in accordance with rights specified in the
apparatus, and
means for processing the request to make the digital content
available by the means for coupling to the receiving repository if the
request is for a permitted transport of the digital content;

independent claim 129, 138 and 148 in relevant part recite:

... receiving digital content and an associated authorization-ID
identifying an authorization object;
... receiving a request to use the digital content;
... locating the authorization object based on the authorization-
ID;
... decrypting the authorization object;
... executing a script associated with the authorization object;
and
... granting access to the digital content, comprising processing
the digital content using the authorization object, if the executing step is
completed satisfactorily; and

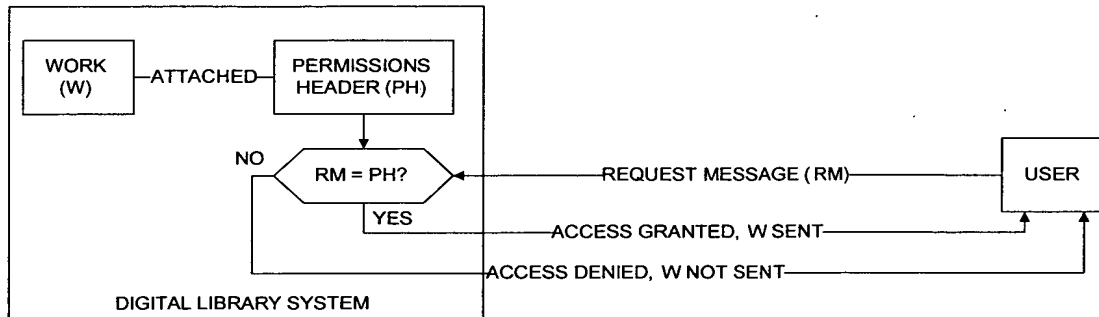
independent claims 157, 166 and 175 in relevant part recite:

... digital content and an associated authorization-ID
identifying an authorization object;
... receiving a request to use the digital content;
... locating the authorization object based on the authorization-
ID;
... decrypting the authorization object;
... performing tests associated with the authorization object;
and
... granting the request to access to the digital content for the
use, comprising processing the digital content using the authorization
object, if the tests are successful.

Thus, independent claims 8, 15, 19, 34, 37, 48, 61, 79, 93, 112, 120, 129, 138, 148, 157, 166 and 175 are directed to the novel feature related to the rendering of content, including controlling the rendering (independent claims 37, and 61), distribution (independent claims 93, 112, and 120), or activation of repositories (independent claim 79) with respect to stored (independent claims 8, and 15) or received (independent claims 19, and 34) content by establishing trust (independent claim 48), or by an authorized repository executing scripts (independent claims 129, 138, and 148) or performing tests (independent claims 157, 166, and 175).

By contrast, as shown below, *Perritt* is directed to a digital library system, wherein permissions header (PH) is attached to a work (W) and a request message (RM) from a user is matched against the permissions header. If there is a match between the request message and the permissions header, access to the work is granted and the work is sent to the user. If, however, there is no match between the request message and the permissions header, access to the work is not granted and the work is not sent to the user.

Perritt



Thus, *Perritt* merely discloses a conventional access control system, and is no better than Applicants' Background Art (see, e.g., ¶¶ [0006]-[0007] of Applicants' published Specification). Accordingly, *Perritt* fails to disclose, teach, or suggest the novel feature related to the rendering of content, as recited in independent claims 8, 15, 19, 34, 37, 48, 61, 79, 93, 112, 120, 129, 138, 148, 157, 166 and 175. Specifically, *Perritt* does not disclose teach, or suggest the enforcement of the use of content, once the content leaves the digital library system, nor transmitting to/receiving at an end user device content and usage rights, including controlling the rendering of content, as recited in independent claims 37, and 61, controlling the rendering of stored content, as recited in independent claims 8, and 15, or controlling the rendering of received content, as recited in independent claims 19, and 34. In fact, *Perritt* teaches away from enforcement of the use of content at an end user device, as *Perritt* states that "[a]n encrypted object combined with rendering software is probably inconsistent with an open architecture" (*Perritt*, page 18, second full paragraph).

Similarly, *Perritt* fails to disclose, teach, or suggest the novel features of activation of repositories, as recited in independent claim 79, distribution of content, as recited in independent claims 93, 112, and 120, establishing trust, as recited in independent claim 48, executing scripts, as recited in independent claims 129, 138, and 148, and an authorized repository performing tests, as recited in independent claims 157, 166, and 175.

Accordingly, independent claims 8, 15, 19, 34, 37, 48, 61, 79, 93, 112, 120, 129, 138, 148, 157, 166 and 175 and claims depended therefrom, are patently distinguishable over *Perritt*. The dependent claims are allowable on their on merits and for at least the reasons as argued above with respect to their independent claims.

In view of the foregoing, it is submitted that the present application is in condition for allowance and a notice to that effect is respectfully requested. However, if the Examiner deems that any issue remains after considering this response, the Examiner is invited to contact the undersigned attorney to expedite the prosecution and engage in a joint effort to work out a mutually satisfactory solution.

Respectfully submitted,

NIXON PEABODY, LLP

/Carlos R. Villamar, Reg. # 43,224/

Carlos R. Villamar

Reg. No. 43,224

NIXON PEABODY LLP

CUSTOMER NO.: 22204

401 9th Street, N.W., Suite 900

Washington, DC 20004

Tel: 202-585-8000

Fax: 202-585-8080

PATENT APPLICATION FEE DETERMINATION RECORD
Effective October 1, 2003

Application or Docket Number

10773306

CLAIMS AS FILED - PART I

	(Column 1)	(Column 2)
TOTAL CLAIMS	39	
FOR	NUMBER FILED	NUMBER EXTRA
TOTAL CHARGEABLE CLAIMS	39 minus 20 =	* 19
INDEPENDENT CLAIMS	7 minus 3 =	* 4
MULTIPLE DEPENDENT CLAIM PRESENT <input type="checkbox"/>		

* If the difference in column 1 is less than zero, enter "0" in column 2

CLAIMS AS AMENDED - PART II

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	* 167	Minus ** 39	= 128
Independent	* 17	Minus *** 7	= 10
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	*	Minus **	=
Independent	*	Minus ***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT C	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	*	Minus **	=
Independent	*	Minus ***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

SMALL ENTITY TYPE ☐ OR

OTHER THAN SMALL ENTITY

RATE	FEE
BASIC FEE	385.00
X\$ 9=	
X43=	
+145=	
TOTAL	

RATE	FEE
BASIC FEE	770.00
X\$18=	
X86=	
+290=	
TOTAL	

SMALL ENTITY OR

OTHER THAN SMALL ENTITY

RATE	ADDITIONAL FEE
25	
120	
+145=	
TOTAL	

RATE	ADDITIONAL FEE
30	
200	
+290=	
TOTAL	

RATE	ADDITIONAL FEE
X\$ 9=	
X43=	
+145=	
TOTAL	

RATE	ADDITIONAL FEE
X\$18=	
X86=	
+290=	
TOTAL	

RATE	ADDITIONAL FEE
X\$ 9=	
X43=	
+145=	
TOTAL	

RATE	ADDITIONAL FEE
X\$18=	
X86=	
+290=	
TOTAL	

- * If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
 - ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."
 - *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3."
- The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Interview Summary	Application No.	Applicant(s)	
	10/773,306	STEFIK ET AL.	
	Examiner	Art Unit	
	James A. Reagan	3621	

All participants (applicant, applicant's representative, PTO personnel):

(1) James A. Reagan. (3)_____.

(2) Carlos Villamar. (4)_____.

Date of Interview: 14 July 2006.

Type: a) ☐ Telephonic b) ☐ Video Conference
c) ☒ Personal [copy given to: 1) ☐ applicant 2) ☒ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.
If Yes, brief description: _____.

Claim(s) discussed: 1-183.

Identification of prior art discussed: Perritt.

Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant's representative agrees to consider reducing the number of pending claims and will submit a supplemental response.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.



JAMES A. REAGAN
PRIMARY EXAMINER

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	)	Confirmation No.: 6652
Mark J. STEFIK , <i>et al.</i>	)	Group Art Unit: 3621
Serial No. 10/773,306	)	Examiner: Reagan, James A
Filed: February 9, 2004)	
For: SYSTEM FOR CONTROLLING THE)	
DISTRIBUTION AND USE OF)	
DIGITAL WORKS UTILIZING		
DIGITAL TICKETS		

U.S. Patent and Trademark Office
Customer Window, Mail Stop Non-Fee Amendment
Randolph Building
401 Dulany Street
Alexandria, VA 22314

SUPPLEMENTAL AMENDMENT

Sir:

In response to the non-final Office Action mailed **April 17, 2006**, further to the response filed on June 27, 2006, incorporated by reference herein, and further to the interview with Examiner Reagan conducted on July 14, 2006, the below amendments and following remarks are submitted in connection with the above-identified application.

Amendments to the Specification:

Please amend the present Title, as follows:

~~**SYSTEM FOR CONTROLLING THE DISTRIBUTION AND USE OF DIGITAL
WORKS UTILIZING DIGITAL TICKETS
CONTENT RENDERING APPARATUS**~~

Amendments to the Claims:

1-60. (Cancelled)

61. (Previously presented) An apparatus for rendering digital content in accordance with rights that are enforced by the apparatus, said apparatus comprising:

a rendering engine configured to render digital content;

a storage for storing the digital content;

means for requesting use of the digital content stored in the storage; and

a repository coupled to the rendering engine,

wherein the repository includes:

means for processing a request from the means for requesting,

means for checking whether the request is for a permitted rendering of the digital content in accordance with rights specified in the apparatus, and

means for processing the request to make the digital content available to the rendering engine for rendering if the request is for a permitted rendering of the digital content.

62. (Previously presented) The apparatus as recited in claim 61, wherein the means for checking comprises means for comparing a requested use with a use specified by the rights.

63. (Previously presented) The apparatus as recited in claim 61 wherein the means for checking comprises means for checking if a particular key is assigned to the repository.

64. (Previously presented) The apparatus as recited in claim 61, further comprising means for requesting a transfer of the digital content from an external memory to the storage.

65. (Previously presented) The apparatus as recited in claim 61, wherein the digital content is audio content.

66. (Previously presented) The apparatus as recited in claim 65, wherein the audio content is music.

67. (Previously presented) The apparatus as recited in claim 61, wherein the digital content is video content.

68. (Previously presented) The apparatus as recited in claim 61, wherein the apparatus is a portable device.

69. (Previously presented) The apparatus as recited in claim 61, wherein the rights are provided by a provider of the digital content.

70. (Previously presented) The apparatus as recited in claim 61, wherein the means for processing comprises transmitting the digital content to the rendering engine.

71. (Previously presented) The apparatus as recited in claim 61, wherein the digital content comprises a composite digital work comprising plural digital works.

72. (Previously presented) The apparatus as recited in claim 61, wherein the rendering engine is configured to render digital content into a medium that is not further protected by rights and the request is for rendering the digital content into a medium that is not further protected by rights.

73. (Previously presented) The apparatus as recited in claim 72, wherein the medium is an optical disk.

74. (Previously presented) The apparatus as recited in claim 61, wherein the means for checking comprises checking whether a maximum number of renderings of the digital content have been made.

75. (Previously presented) The apparatus as recited in claim 61, wherein the rights are embodied in software instructions which implement the use privileges for the rights.

76. (Previously presented) The apparatus as recited in claim 61, further comprising means for authorizing the repository for making the digital content available for rendering, wherein the digital content can be made available for rendering only by an authorized repository, comprising:

means for making a request for an authorization object required to be included within the repository for the apparatus to render the digital content; and

means for receiving the authorization object if it is determined that the request should be granted.

77. (Previously presented) The apparatus as recited in claim 61, further comprising:

means for receiving requests for transporting the digital content stored in the storage;

means for determining whether a second repository is permitted to receive the digital content specified by the request; and

means for transporting the digital content to the second repository only if the second repository is permitted to receive the digital content.

78. (Previously presented) The apparatus as recited in claim 61, further comprising:

means for requesting receipt of digital content stored outside the apparatus; and

means for receiving the digital content if the apparatus is permitted to receive the digital content.

79-183. (Cancelled)

184. (New) A method for controlling rendering of digital content on an apparatus having a rendering engine configured to render digital content and a storage for storing the digital content, said method comprising:

specifying rights within said apparatus for digital content stored in said storage, said rights specifying how digital content can be rendered;

storing digital content in said storage;

receiving a request for rendering of said digital content stored in the storage;

checking whether said request is for a permitted rendering of said digital content in accordance with said rights specified within said apparatus; and

processing the request to make said digital content available to the rendering engine for rendering if said request is for a permitted rendering of said digital content.

185. (New) The method as recited in claim 184, wherein the checking step comprises comparing a requested use with a use specified by the rights.

186. (New) The method as recited in claim 184 wherein the checking step comprises checking if a particular key is assigned to the repository.

187. (New) The method as recited in claim 184, further comprising requesting a transfer of the digital content from an external memory to the storage.

188. (New) The method as recited in claim 184, wherein the digital content is audio content.

189. (New) The method as recited in claim 188, wherein the audio content is music.

190. (New) The method as recited in claim 184, wherein the digital content is video content.

191. (New) The method as recited in claim 184, wherein the method is implemented in a portable device.

192. (New) The method as recited in claim 184, wherein the rights are provided by a provider of the digital content.

193. (New) The method as recited in claim 184, wherein the processing step comprises transmitting the digital content to the rendering engine.

194. (New) The method as recited in claim 184, wherein the digital content comprises a composite digital work comprising plural digital works.

195. (New) The method as recited in claim 184, wherein the rendering engine is configured to render digital content into a medium that is not further protected by rights and the request is for rendering the digital content into a medium that is not further protected by rights.

196. (New) The method as recited in claim 195, wherein the medium is an optical disk.

197. (New) The method as recited in claim 184, wherein the checking step comprises checking whether a maximum number of renderings of the digital content have been made.

198. (New) The method as recited in claim 184, wherein the rights are embodied in software instructions which implement the use privileges for the rights.

199. (New) The method as recited in claim 184, further comprising:
authorizing a repository for making the digital content available for rendering, wherein the digital content can be made available for rendering only by an authorized repository, the repository performing the steps of:

making a request for an authorization object required to be included within the repository for rendering of the digital content; and

receiving the authorization object if it is determined that the request should be granted.

200. (New) The method as recited in claim 184, further comprising:
receiving a request for transporting the digital content stored in the storage;
determining whether a repository is permitted to receive the digital content specified by the request; and
transporting the digital content to the repository only if the repository is permitted to receive the digital content.

201. (New) The method as recited in claim 184, further comprising:
requesting receipt of digital content stored externally; and
receiving the digital content if it is permitted to receive the digital content.

202. (New) The method as recited in claim 184, further comprising implementing the method with one or more hardware and software devices.

203. (New) The method as recited in claim 184, further comprising implementing the method with one or more computer readable instructions embedded on a computer readable medium and configured to cause one or more computer processors to perform the steps of the method.

REMARKS

The following amendments and remarks are submitted to be fully responsive to the Official Action of **April 17, 2006**. In the present amendment, claims 1-60 and 79-183 are cancelled, and claims 184-203 are added. No new matter is introduced (see, e.g., claims 61-78, as previously presented). Thus, claims 61-78 and 184-203 are now pending. Reconsideration and allowance of this application are respectfully requested.

First, Applicants wish to thank Examiner Reagan for the personal interview conducted on July 14, 2006, and at which time it was agreed to file the present Supplemental Amendment directed to a single invention, as recited in present independent claims 61, and 184, and the claims dependent therefrom.

As discussed during the interview, the present independent claims 61 and 184, and the claims dependent therefrom, are patently distinguishable over *Perritt* (“Perritt Knowbots, Permissions Headers & Contract Law”), because *Perritt* fails to disclose, teach, or suggest all the features recited the claims. For example, independent claims 61 (emphasis added) and 184, in relevant part recites:

An apparatus for rendering digital content in accordance with rights that are enforced by the apparatus, said apparatus comprising:
a rendering engine configured to render digital content;
a storage for storing the digital content;
means for **requesting use of the digital content stored in the storage**; and
a repository coupled to the rendering engine,
wherein the repository includes:
means for processing a request from the means for requesting,
means for **checking whether the request is for a permitted rendering of the digital content in accordance with rights specified in the apparatus**, and
means for **processing the request to make the digital content available to the rendering engine for rendering if the request is for a permitted rendering of the digital content**.

Independent claims 184 (emphasis added) recites:

A method for controlling rendering of digital content on an apparatus having a rendering engine configured to render digital content and a storage for storing the digital content, said method comprising:

specifying rights within said apparatus for digital content stored in said storage, said rights specifying how digital content can be rendered;

storing digital content in said storage;

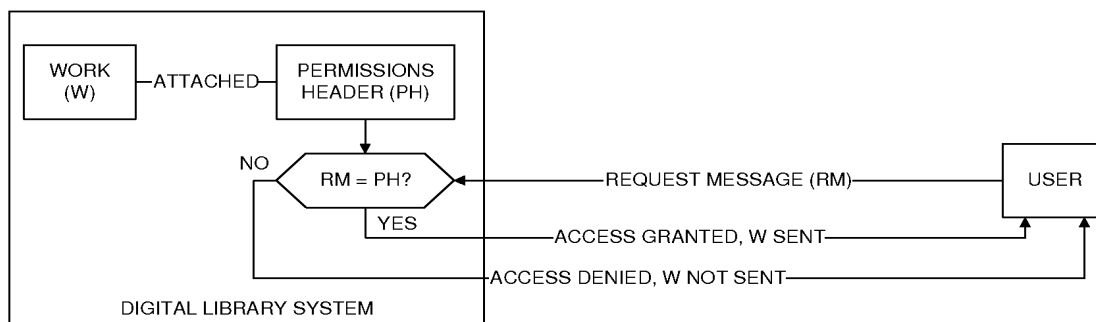
receiving a request for rendering of said digital content stored in the storage;

checking whether said request is for a permitted rendering of said digital content in accordance with said rights specified within said apparatus; and

processing the request to make said digital content available to the rendering engine for rendering if said request is for a permitted rendering of said digital content.

By contrast, as shown below, *Perritt* is directed to a digital library system, wherein permissions header (PH) is attached to a work (W) and a request message (RM) from a user is matched against the permissions header. If there is a match between the request message and the permissions header, access to the work is granted and the work is sent to the user. If, however, there is no match between the request message and the permissions header, access to the work is not granted and the work is not sent to the user.

Perritt



Thus, *Perritt* merely discloses a conventional access control system, and is no better than Applicants' Background Art (see, e.g., ¶¶ [0006]-[0007] of Applicants' published Specification). However, *Perritt* fails to disclose, teach, or suggest the novel feature related to the rendering of content, as recited in independent claims 61 and 184.

Accordingly, independent claims 61 and 184 and claims depended therefrom, are patently distinguishable over *Perritt*. The dependent claims are allowable on their own merits and for at least the reasons as argued above with respect to their independent claims.

In view of the foregoing, it is submitted that the present application is in condition for allowance and a notice to that effect is respectfully requested. However, if the Examiner deems that any issue remains after considering this response, the Examiner is invited to contact the undersigned attorney to expedite the prosecution and engage in a joint effort to work out a mutually satisfactory solution.

Respectfully submitted,

NIXON PEABODY, LLP

/Carlos R. Villamar, Reg. # 43,224/

Carlos R. Villamar

Reg. No. 43,224

NIXON PEABODY LLP

CUSTOMER NO.: 22204

401 9th Street, N.W., Suite 900

Washington, DC 20004

Tel: 202-585-8000

Fax: 202-585-8080

Electronic Acknowledgement Receipt

EFS ID:	1149484
Application Number:	10773306
Confirmation Number:	6652
Title of Invention:	System for controlling the distribution and use of digital works utilizing digital tickets
First Named Inventor:	Mark J. Stefik
Customer Number:	22204
Filer:	Carlos Rafael Villamar/Kisha Avery
Filer Authorized By:	Carlos Rafael Villamar
Attorney Docket Number:	111325-127
Receipt Date:	10-AUG-2006
Filing Date:	09-FEB-2004
Time Stamp:	15:22:04
Application Type:	Utility
International Application Number:	

Payment information:

Submitted with Payment	no
------------------------	----

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)	Multi Part	Pages
1	Amendment - After Non-Final Rejection	111325-021100__US_Supplemental_Response_to_NFO A_17_APR_06.pdf	55510	no	11

Warnings:	
Information:	
Total Files Size (in bytes):	55510
<p>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</p> <p><u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p>	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD					Application of Docket Number <i>10175304</i>	
Substitute for Form PTO-875						
APPLICATION AS FILED – PART I						
(Column 1)		(Column 2)		SMALL ENTITY OR OTHER THAN SMALL ENTITY		
FOR	NUMBER FILED	NUMBER EXTRA		RATE (\$)	FEE (\$)	
BASIC FEE (37 CFR 1.16(a), (b), or (c))						
SEARCH FEE (37 CFR 1.16(k), (l), or (m))						
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))						
TOTAL CLAIMS (37 CFR 1.16(j))	minus 20 =	*		X =	X =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		X =	X =	
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).					
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))						
					TOTAL	TOTAL
<small>* If the difference in column 1 is less than zero, enter "0" in column 2.</small>						
APPLICATION AS AMENDED – PART II						
(Column 1)		(Column 2)		SMALL ENTITY OR OTHER THAN SMALL ENTITY		
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(j))	Minus	**	=	X =	X =
	Independent (37 CFR 1.16(h))	Minus	***	=	X =	X =
	Application Size Fee (37 CFR 1.16(s))					
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					
					TOTAL ADD'L FEE	TOTAL ADD'L FEE
(Column 1)		(Column 2)		(Column 3)		
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(j))	*	Minus	**	=	X =
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X =
	Application Size Fee (37 CFR 1.16(s))					
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					
					TOTAL ADD'L FEE	TOTAL ADD'L FEE
<small>* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.</small>						

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/773,306

02/09/2004

Mark J. Stefik

111325-127

6652

22204

7590

10/04/2006

NIXON PEABODY, LLP
401 9TH STREET, NW
SUITE 900
WASHINGTON, DC 20004-2128

EXAMINER

REAGAN, JAMES A

ART UNIT

PAPER NUMBER

3621

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/773,306

Applicant(s)

STEFIK ET AL.

Examiner

James A. Reagan

Art Unit

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 61-78 and 184-203 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 61-75, 77, 78, 184-198 and 200-203 is/are rejected.
- 7) ☒ Claim(s) 76 and 199 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. This action is in reply to the response filed on 10 August 2006.
2. Claims 61-78 and 184-203 have been added.
3. Claims 1-60 and 79-183 have been canceled.
4. Claims 61-78 and 184-203 are currently pending and have been examined.

Allowable Subject Matter

5. Claims 76 and 199 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

RESPONSE TO ARGUMENTS

6. Applicant's arguments received on 10 August 2006 have been fully considered but they are not persuasive. Referring to the previous Office action, Examiner has cited relevant portions of the references as a means to illustrate the systems as taught by the prior art. As a means of providing further clarification as to what is taught by the references used in the first Office action, Examiner has expanded the teachings for comprehensibility while maintaining the same grounds of rejection of the claims, except as noted above in the section labeled "Status of Claims." This information is intended to assist in illuminating the teachings of the references while providing evidence that establishes further support for the rejections of the claims.

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 61-75, 77, 78, 184-198, and 200-203 are rejected under 35 U.S.C. 102(b) as being anticipated by Perritt "Knowbots, Permissions Headers and Contract Law" (30 April 1993).

Examiner's Note: The Examiner has pointed out particular references contained in the prior art of record within the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Claims 1-39:

Perritt discloses a Digital Rights Management System (page 3, bottom), levels of permission for copying, distributing, and deriving digital works (page 1, middle), servers and a network of servers (page 3, top), encryption of content (page 4, top), cost/pricing and multiple levels of pricing (page 4, middle, bottom), and rendering of digital files (page 16, bottom).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
10. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 3621

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **James A. Reagan** whose telephone number is **571.272.6710**. The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **ANDREW J. FISCHER** can be reached at **571.272.6779**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> . Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to **571-273-8300**.

Hand delivered responses should be brought to the **United States Patent and Trademark Office Customer Service Window:**

Randolph Building

401 Dulany Street

Alexandria, VA 22314.

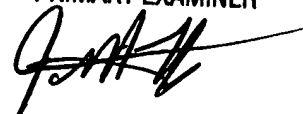
JAMES A. REAGAN

Primary Examiner

Art Unit 3621

20 September 2006

JAMES A. REAGAN
PRIMARY EXAMINER



PLUS Search Results for S/N 10773306, Searched Fri Oct 20 07:34:56 EDT 2006

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

6236971 99	20060200417 84	6185682 67
20010014882 99	5629980 71	6233561 67
20010023417 99	5634012 71	6260027 67
6708157 84	5715403 71	6282522 67
6714921 84	5809301 71	6429923 67
6857071 84	5896535 71	6490355 67
6898576 84	6220413 71	6748471 67
6920436 84	6220413 71	6865675 67
6934693 84	6253193 71	6934851 67
6944600 84	6363488 71	6976084 67
6957194 84	6389402 71	7093046 67
7039613 84	6427140 71	7095518 67
7058606 84	20050044016 71	20020184378 67
7117180 84	20050105728 71	20030005050 67
20010010045 84	4408291 68	20030016824 67
20030023561 84	4333049 68	20030033319 67
20030069849 84	5661789 68	20030159043 67
20030079133 84	5760775 68	20040148335 67
20030115144 84	5790119 68	20050280864 67
20030167236 84	5872569 68	20060084488 67
20030208447 84	6487659 68	20060114508 67
20030217010 84	7020636 68	6173900 59
20030225698 84	20040049464 68	20050031103 59
20030225699 84	20040125957 68	4531171 59
20040059678 84	20050234826 68	5233658 59
20040064417 84	20060233315 68	5970149 59
20040073513 84	5751703 68	6112983 59
20040073514 84	6954738 68	6408283 59
20040073515 84	6963858 68	20020184137 59
20040220880 84	7028009 68	20020184518 59
20040225611 84	7093130 68	6068183 58
20040243834 84	20020107806 68	20020156741 58
20040255138 84	20020198843 68	6121911 56
20050043960 84	20030061165 68	4551810 56
20050108173 84	20030135466 68	4554635 56
20050160048 84	20040034786 68	4884068 56
20050165687 84	20040111694 68	5291600 56
20050216415 84	20040149121 68	5450082 56
20050251482 84	20060047977 68	5577250 56
20050273432 84	20060085353 68	5638443 56
20050273433 84	20060167816 68	5686835 56
20050289068 84	20060173787 68	5765152 56
20060004665 84	4916294 67	5949011 56
20060041512 84	5420797 67	6035029 56
20060085348 84	5479507 67	6075768 56
20060106722 84	5488664 67	6202056 56
20060149680 84	5500681 67	6208354 56
20060167801 84	5978013 67	6233684 56
20060190404 84	6107913 67	6282653 56

6298326 56	20060116964 56	4976552 56
6799271 56	20060117090 56	4989042 56
6865551 56	20060122942 56	4996778 56
6876984 56	20060129492 56	5014222 56
6889206 56	20060129493 56	5177770 56
6895392 56	4456093 56	5181261 56
6910022 56	4608480 56	5202991 56
6925448 56	4630696 56	5254813 56
6928419 56	4954827 56	5259186 56
6957193 56	5396344 56	5262964 56
6959290 56	5406306 56	5268846 56
6963859 56	5444768 56	5287345 56
6973445 56	5719591 56	5292099 56
6999946 56	5726676 56	5305597 56
7024392 56	5785666 56	5329308 56
7031471 56	5964719 56	5337488 56
7043453 56	5999860 56	5351276 56
7051004 56	6014183 56	5369419 56
7065505 56	3586830 56	5404347 56
7089315 56	4097723 56	5467411 56
7096202 56	4129037 56	5504911 56
7113912 56	4264441 56	5509039 56
20010008557 56	4281216 56	5517191 56
20010016837 56	4284977 56	5518397 56
20010032187 56	4316082 56	5528309 56
20020023219 56	4322161 56	5539667 56
20020128856 56	4328874 56	5560034 56
20020128972 56	4352117 56	5559626 56
20020133465 56	RE31208 56	5582550 56
20020184156 56	4393279 56	5603049 56
20020184158 56	4413318 56	5608608 56
20020184159 56	4430653 56	5608418 56
20030007437 56	4449559 56	5633744 56
20030007640 56	4470109 56	5642207 56
20030009681 56	4479249 56	5670983 56
20030163724 56	4487741 56	5682329 56
20030200177 56	4510570 56	5700136 56
20030225701 56	4528593 56	5709216 56
20030236886 56	4541048 56	5719825 56
20040015446 56	4563710 56	5748443 56
20040073516 56	4563660 56	5758139 56
20040107166 56	4577288 56	
20040148503 56	4599801 56	
20040210535 56	4630301 56	
20040210765 56	4788674 56	
20050080735 56	4814871 56	
20050080910 56	4816659 56	
20050086172 56	RE33001 56	
20050149450 56	4866663 56	
20050187877 56	4876977 56	
20050197963 56	4886010 56	
20050273600 56	4891254 56	
20060095387 56	4891810 56	
20060107330 56	4918759 56	
20060112015 56	4920488 56	
20060116963 56	4949088 56	

Electronic Patent Application Fee Transmittal

Application Number:	10773306			
Filing Date:	09-Feb-2004			
Title of Invention:	System for controlling the distribution and use of digital works utilizing digital tickets			
First Named Inventor/Applicant Name:	Mark J. Stefik			
Filer:	Carlos Rafael Villamar/Kisha Avery			
Attorney Docket Number:	111325-127			
Filed as Large Entity				
Utility Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Statutory disclaimer	1814	1	130	130
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Total in USD (\$)				130

Electronic Acknowledgement Receipt

EFS ID:	1460273
Application Number:	10773306
International Application Number:	
Confirmation Number:	6652
Title of Invention:	System for controlling the distribution and use of digital works utilizing digital tickets
First Named Inventor/Applicant Name:	Mark J. Stefik
Customer Number:	22204
Filer:	Carlos Rafael Villamar/Kisha Avery
Filer Authorized By:	Carlos Rafael Villamar
Attorney Docket Number:	111325-127
Receipt Date:	23-JAN-2007
Filing Date:	09-FEB-2004
Time Stamp:	19:39:21
Application Type:	Utility

Payment information:

Submitted with Payment	yes
Payment was successfully received in RAM	\$ 130
RAM confirmation Number	966
Deposit Account	192380
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. Section 1.16 and 1.17	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)	Multi Part /.zip	Pages (if appl.)
1	Terminal Disclaimer Filed	111325_021100_Terminal_D isclaimer_Over_USP_6_944 _600.pdf	29133	no	1
Warnings:					
Information:					
2	Fee Worksheet (PTO-06)	fee-info.pdf	8187	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			37320		
<p>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</p> <p><u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p>					

NOTICE OF APPEAL FROM THE EXAMINER TO THE BOARD OF PATENT APPEALS AND INTERFERENCES		Docket Number (Optional) 111325-021100									
<p style="text-align: center;">CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.89(a)]</p> <p>I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, or being facsimile transmitted to the USPTO at _____, on _____.</p> <p>Signature: _____</p> <p>Name: _____</p>		<p>In re Application of Mark J. STEFIK</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; padding: 2px;">Application Number 10/773,306</td> <td style="width: 40%; padding: 2px;">Filed February 9, 2004</td> </tr> </table> <p style="text-align: center;">For SYSTEM AND CONTROLLING THE DISTRIBUTION AND USE OF DIGITAL WORKS UTILIZING DIGITAL TICKETS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 2px;">Group Art Unit: 3621</td> <td style="width: 50%; padding: 2px;">Examiner: James A. Reagan</td> </tr> </table>		Application Number 10/773,306	Filed February 9, 2004	Group Art Unit: 3621	Examiner: James A. Reagan				
Application Number 10/773,306	Filed February 9, 2004										
Group Art Unit: 3621	Examiner: James A. Reagan										
<p>Applicant hereby appeals to the Board of Patent Appeals and Interferences from the decision of the examiner.</p> <p>The fee for this Notice of Appeal is (37 CFR 1.17(b)) \$ <u>500.00</u></p> <p><input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Therefore, the fee shown above is reduced by half, and the resulting fee is: \$ _____</p> <p><input type="checkbox"/> A check in the amount of the fee is enclosed.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input type="checkbox"/> The Commissioner has already been authorized to charge fees in this application to a Deposit Account. I have enclosed a duplicate copy of this sheet.</p> <p><input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 19-2380.</p> <p><input checked="" type="checkbox"/> A petition for an extension of time under 37 CFR 1.136(a) (PTO/SB/22) is enclosed.</p> <p>WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</p> <p>I am the</p> <table style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> applicant/inventor. </td> <td style="width: 50%; vertical-align: top;"> <u>/Carlos R. Villamar, Reg. # 43,224/</u> Signature </td> </tr> <tr> <td style="vertical-align: top;"> <input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96) </td> <td></td> </tr> <tr> <td style="vertical-align: top;"> <input type="checkbox"/> attorney or agent of record </td> <td style="vertical-align: top;"> <u>Carlos R. Villamar</u> Typed or printed name </td> </tr> <tr> <td style="vertical-align: top;"> <input checked="" type="checkbox"/> attorney or agent acting under 37 CFR 1.34(a). Registration number if acting under 37 CFR 1.34(a) <u>43,224</u> . </td> <td style="vertical-align: top;"> <u>April 4, 2007</u> Date </td> </tr> </table> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>				<input type="checkbox"/> applicant/inventor.	<u>/Carlos R. Villamar, Reg. # 43,224/</u> Signature	<input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)		<input type="checkbox"/> attorney or agent of record	<u>Carlos R. Villamar</u> Typed or printed name	<input checked="" type="checkbox"/> attorney or agent acting under 37 CFR 1.34(a). Registration number if acting under 37 CFR 1.34(a) <u>43,224</u> .	<u>April 4, 2007</u> Date
<input type="checkbox"/> applicant/inventor.	<u>/Carlos R. Villamar, Reg. # 43,224/</u> Signature										
<input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)											
<input type="checkbox"/> attorney or agent of record	<u>Carlos R. Villamar</u> Typed or printed name										
<input checked="" type="checkbox"/> attorney or agent acting under 37 CFR 1.34(a). Registration number if acting under 37 CFR 1.34(a) <u>43,224</u> .	<u>April 4, 2007</u> Date										
<input type="checkbox"/> *Total of _____ forms are submitted.											

Electronic Patent Application Fee Transmittal

Application Number:	10773306			
Filing Date:	09-Feb-2004			
Title of Invention:	System for controlling the distribution and use of digital works utilizing digital tickets			
First Named Inventor/Applicant Name:	Mark J. Stefik			
Filer:	Carlos Rafael Villamar/Kisha Avery			
Attorney Docket Number:	021100			
Filed as Large Entity				
Utility Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Extension - 3 months with \$0 paid	1253	1	1020	1020

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Total in USD (\$)				1020

Electronic Acknowledgement Receipt

EFS ID:	1654853
Application Number:	10773306
International Application Number:	
Confirmation Number:	6652
Title of Invention:	System for controlling the distribution and use of digital works utilizing digital tickets
First Named Inventor/Applicant Name:	Mark J. Stefik
Customer Number:	22204
Filer:	Carlos Rafael Villamar/Kisha Avery
Filer Authorized By:	Carlos Rafael Villamar
Attorney Docket Number:	021100
Receipt Date:	04-APR-2007
Filing Date:	09-FEB-2004
Time Stamp:	18:01:47
Application Type:	Utility

Payment information:

Submitted with Payment	yes
Payment was successfully received in RAM	\$ 1020
RAM confirmation Number	920
Deposit Account	192380
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. Section 1.16 and 1.17	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)	Multi Part /.zip	Pages (if appl.)
1	Notice of Appeal Filed	111325_021100_Notice_of_Appeal.pdf	26738	no	1
Warnings:					
Information:					
2	Fee Worksheet (PTO-06)	fee-info.pdf	8187	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			34925		
<p>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</p> <p><u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p> <p><u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</p>					

Electronic Patent Application Fee Transmittal

Application Number:	10773306			
Filing Date:	09-Feb-2004			
Title of Invention:	System for controlling the distribution and use of digital works utilizing digital tickets			
First Named Inventor/Applicant Name:	Mark J. Stefik			
Filer:	Carlos Rafael Villamar/Kisha Avery			
Attorney Docket Number:	021100			
Filed as Large Entity				
Utility Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Notice of appeal	1401	1	500	500
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Total in USD (\$)				500

Electronic Acknowledgement Receipt

EFS ID:	1654895
Application Number:	10773306
International Application Number:	
Confirmation Number:	6652
Title of Invention:	System for controlling the distribution and use of digital works utilizing digital tickets
First Named Inventor/Applicant Name:	Mark J. Stefik
Customer Number:	22204
Filer:	Carlos Rafael Villamar/Kisha Avery
Filer Authorized By:	Carlos Rafael Villamar
Attorney Docket Number:	021100
Receipt Date:	04-APR-2007
Filing Date:	09-FEB-2004
Time Stamp:	18:10:50
Application Type:	Utility

Payment information:

Submitted with Payment	yes
Payment was successfully received in RAM	\$ 500
RAM confirmation Number	935
Deposit Account	192380
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. Section 1.16 and 1.17	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)	Multi Part /.zip	Pages (if appl.)
1	Fee Worksheet (PTO-06)	fee-info.pdf	8181	no	2

Warnings:

Information:

Total Files Size (in bytes):	8181
-------------------------------------	------

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111


If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Application Number 	Application/Control No. 10/773,306	Applicant(s)/Patent under Reexamination STEFIK ET AL.	
Document Code - DISQ		Internal Document – DO NOT MAIL	

TERMINAL DISCLAIMER	<input checked="" type="checkbox"/> APPROVED	<input type="checkbox"/> DISAPPROVED
Date Filed : 23 JAN 2007	This patent is subject to a Terminal Disclaimer	

Approved/Disapproved by:
SHANETTE BROWN

U.S. Patent and Trademark Office

Most frequently occurring classifications of patents returned
from a search of 10773306 on May 23 , 2007

Original Classifications

23 705/51
4 705/52
3 705/54
3 709/229
2 705/1
2 713/193

Cross-Reference Classifications

10 705/50
9 705/54
8 705/59
8 705/57
6 705/53
5 380/201
5 705/52
4 705/1
4 707/9
3 705/51
3 705/56
3 713/182
3 380/200
3 380/204
2 705/55
2 705/58
2 707/104.1
2 713/184
2 713/186
2 713/185
2 713/183
2 380/231
2 380/232
2 713/156
2 713/157
2 726/26

Combined Classifications

26 705/51
12 705/54
10 705/50
9 705/52
9 705/59
9 705/57
6 705/1
6 705/53
5 380/201
4 707/9
3 705/55
3 705/56
3 713/182
3 709/229
3 380/200
3 380/204
3 380/231
2 705/58
2 707/104.1
2 713/184
2 713/186
2 713/185

10773306_CLS1.txt

2 713/183
2 713/193
2 380/232
2 713/168
2 713/156
2 713/157
2 726/26



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

22204

7590

06/13/2007

NIXON PEABODY, LLP
401 9TH STREET, NW
SUITE 900
WASHINGTON, DC 20004-2128

EXAMINER

AGWUMEZIE, CHARLES C

ART UNIT

PAPER NUMBER

3621

DATE MAILED: 06/13/2007

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/773,306

02/09/2004

Mark J. Stefik

021100

6652

TITLE OF INVENTION: SYSTEM FOR CONTROLLING THE DISTRIBUTION AND USE OF DIGITAL WORKS UTILIZING DIGITAL TICKETS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$0	\$1700	09/13/2007

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

22204 7590 06/13/2007

NIXON PEABODY, LLP
401 9TH STREET, NW
SUITE 900
WASHINGTON, DC 20004-2128

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/773,306 02/09/2004 Mark J. Stefik 021100 6652

TITLE OF INVENTION: SYSTEM FOR CONTROLLING THE DISTRIBUTION AND USE OF DIGITAL WORKS UTILIZING DIGITAL TICKETS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
-------------	--------------	---------------	---------------------	----------------------	------------------	----------

nonprovisional NO \$1400 \$300 \$0 \$1700 09/13/2007

EXAMINER	ART UNIT	CLASS-SUBCLASS
----------	----------	----------------

AGWUMEZIE, CHARLES C 3621 705-050000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,306	02/09/2004	Mark J. Stefik	021100	6652
22204	7590	06/13/2007	EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			AGWUMEZIE, CHARLES C	
			ART UNIT	PAPER NUMBER
			3621	
DATE MAILED: 06/13/2007				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 239 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 239 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.

10/773,306

Examiner

Charlie C. Agwumezie

Applicant(s)

STEFIK ET AL.

Art Unit

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication filed 01/23/07.
2. ☒ The allowed claim(s) is/are 61-75,77,78,184-198 and 200-203.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 6/16/05 and 10/14/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Charlie C.L. Agwumezie
Patent Examiner
Art Unit 3621

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on January 23, 2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Patent No. **6,944,600** has been reviewed and is accepted. The terminal disclaimer has been recorded.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Carlos Villamar on May 22, 2007.

Status of Claims

3. Claims 1-60, 76, 79-183 and 199 are cancelled. Claims 61 and 184 are amended. Claims 61-75, 77-78, 184-198 and 200-203 are allowed subject to the examiner's amendment.

4. The Application has been amended as follows:

Art Unit: 3621

61. (Currently amended) An apparatus for rendering digital content in accordance with rights that are enforced by the apparatus, said apparatus comprising:

a rendering engine configured to render digital content;

a storage for storing the digital content;

means for requesting use of the digital content stored in the storage; and

a repository coupled to the rendering engine,

wherein the repository includes:

means for processing a request from the means for requesting,

means for checking whether the request is for a permitted rendering of the digital content in accordance with rights specified in the apparatus, [[and]]

means for processing the request to make the digital content available to the rendering engine for rendering [[if]] when the request is for a permitted rendering of the digital content; and

means for authorizing the repository for making the digital content available for rendering, wherein the digital content can be made available for rendering only by an authorized repository, the repository comprising:

means for making a request for an authorization object required to be included within the repository for the apparatus to render the digital content; and

means for receiving the authorization object when it is determined that the request should be granted.

184. (Currently amended) A method for controlling rendering of digital content on an apparatus having a rendering engine configured to render digital content and a storage for storing the digital content, said method comprising:

specifying rights within said apparatus for digital content stored in said storage, said rights specifying how digital content can be rendered;

storing digital content in said storage;

receiving a request for rendering of said digital content stored in the storage;

checking whether said request is for a permitted rendering of said digital content in accordance with said rights specified within said apparatus; [[and]]

processing the request to make said digital content available to the rendering engine for rendering [[if]] when said request is for a permitted rendering of said digital content;

authorizing a repository for making the digital content available for rendering, wherein the digital content can be made available for rendering only by an authorized repository, the repository performing the steps of:

making a request for an authorization object required to be included within the repository for rendering of the digital content; and

receiving the authorization object when it is determined that the request should be granted.

5. Claims 61-75, 77-78, 184-198 and 200-203 are allowed.

Reasons for Allowance

6. The following is an examiner's statement of reasons for allowance:

The closest prior art of record is Perritt "Knowbots, Permissions Headers and Contract Law" (30 April 1993).

Applicant's invention discloses an apparatus for rendering digital content in accordance with rights that are enforced by the apparatus, said apparatus comprising: a rendering engine configured to render digital content; a storage for storing the digital content; means for requesting use of the digital content stored in the storage; and a repository coupled to the rendering engine, wherein the repository includes: means for

processing a request from the means for requesting, means for checking whether the request is for a permitted rendering of the digital content in accordance with rights specified in the apparatus, means for processing the request to make the digital content available to the rendering engine for rendering when the request is for a permitted rendering of the digital content; and means for authorizing the repository for making the digital content available for rendering, wherein the digital content can be made available for rendering only by an authorized repository, the repository comprising: means for making a request for an authorization object required to be included within the repository for the apparatus to render the digital content; and means for receiving the authorization object when it is determined that the request should be granted.

Perritt is directed to a digital library system, wherein permissions header (PH) is attached to a work (W) and a request message (RM) from a user is matched against the permissions header. If there is a match between the request message and the permissions header, access to the work is granted and the work is sent to the user. If, however, there is no match between the request message and the permissions header, access to the work is not granted and the work is not sent to the user. Accordingly, Perritt separately or in combination with any other reference of record fails to disclose or suggest all the elements of the claimed invention. Perritt fails to disclose, teach, or suggest the novel feature related to the rendering of content, as recited in independent claims 61 and 184. Specifically Perritt fails to disclose means for processing the request to make the digital content available to the rendering engine for rendering when the request is for a permitted rendering of the digital content; and means for authorizing the

Art Unit: 3621

repository for making the digital content available for rendering, wherein the digital content can be made available for rendering only by an authorized repository, the repository comprising: means for making a request for an authorization object required to be included within the repository for the apparatus to render the digital content; and means for receiving the authorization object when it is determined that the request should be granted. Thus the claims of the present invention are patentable over the prior art of record.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

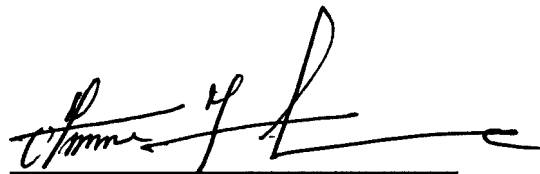
8. The prior arts made of record and not relied upon is considered pertinent to applicants disclosure.

- Faber (U.S. Patent 4,891,838) discloses Computer Accessing System.
- Lipscomb et al (U.S. Patent No. 5,473,687) discloses Method for Retrieving Secure Information from a database.
- Ginter et al (U.S. Patent No. 5,917,912) discloses System and Method for Secure Transaction management and Electronic Rights Protection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles C. Agwumezie whose number is **(571) 272-6838**. The examiner can normally be reached on Monday – Friday 8:00 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Andrew Fischer** can be reached on **(571) 272 – 6779**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Charlie Lion Agwumezie', written over a horizontal line.

Charlie Lion Agwumezie
Patent Examiner
Art Unit 3621

Acc
May 22, 2007

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 10

Complete if Known

Application Number	10/773,306
Filing Date	February 9, 2004
First Named Inventor	Mark J. STEFIK, et al.
Art Unit	2131
Examiner Name	Not Yet Assigned
Attorney Docket Number	111325-127 (021100)

U.S. PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
I.C.A. ↓		US-3,263,158	07/01/1996	Janis	
		US-3,609,697	09/28/1971	Blevins et al.	
		US-3,790,700	02/05/1974	Callais et al.	
		US-3,798,605	03/19/1974	Feistel	
		US-4,159,468	06/26/1979	Barnes et al.	
		US-4,220,991	09/02/1980	Hamano et al.	
		US-4,278,837	07/14/1981	Best	
		US-4,323,921	04/06/1982	Guillou	
		US-4,442,486	04/10/1984	Mayer	
		US-4,529,870	07/16/1985	Chaum	
		US-4,558,176	12/10/1985	Arnold et al.	
		US-4,593,376	06/03/1986	Volk	
		US-4,614,861	09/30/1986	Pavlov et al.	
		US-4,644,493	02/17/1987	Chandra et al.	
		US-4,658,093	04/14/1987	Hellman	
↓		US-4,713,753	12/15/1987	Beobert et al.	
		US-4,796,220	01/03/1989	Wolfe	
		US-4,817,140	03/28/1989	Chandra et al.	
I.C.A.		US-4,827,508	05/02/1989	Shear	
		US-4,868,376	09/19/1989	Lessin et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			
I.C.A./		0 084 441	EP	07/27/1983	TABS LIMITED		
		0 180 460	EP	05/07/1986	SONY CORPORATION		
		0 332 707	EP	09/01/1989	HONDA GIKEN KOGYO KABUSHIKI KAISHA		
		0 538 216 A1	EP	04/21/1993	TELEVERKET		
		0 651 554	EP	05/03/1995	EASTMAN KODAK CO.		
		0 668 695	EP	08/23/1995	VICTOR COMPANY OF JAPAN LIMITED		
		0 725 376	EP	08/07/1996	SONY CORP.		
		2 136 175	GB	09/12/1984	ATALLA CORP.		
		2 236 604	GB	04/10/1991	SUN MICROSYSTEMS INC		
		0 715 241	JP	06/05/1996	MITSUBISHI CORP.		
I.C.A./		04-369068	JP	12/21/1992	CHIYUUBU NIHON DENKI SOFUTOUEA KK		Abst

Examiner Signature /Charles Agwumezie/

Date Considered

05/22/2007

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, et al.
				Art Unit	2131
				Examiner Name	Not Yet Assigned
Sheet	2	of	10	Attorney Docket Number	111325-127 (021100)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
/C.A./ ↓ 					

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³	Number ⁴ Kind Code ⁵ (if known)				
/C.A./ ↓ 							

Examiner Signature	/Charles Agwumezie/	Date Considered	
-----------------------	---------------------	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.


¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, et al.
				Art Unit	2131
Examiner Name	Not Yet Assigned				
Sheet	3	of	10	Attorney Docket Number	111325-127 (021100)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
I.C.A. ↓					

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³	Number ⁴ Kind Code ² (if known)				
I.C.A./		WO 93/01550	PCT	01/21/1993	INFOLOGIC SOFTWARE, INC		
		WO 94/01821	PCT	01/20/1994	SECURE COMPUTING CORP.		
		WO 96/24092	PCT	08/08/1996	BENSON, Greg		
		WO 97/48203	PCT	12/18/1997	INTEL CORP.		
		WO 98/11690	PCT	03/19/1998	GLOVER, John J.		
		WO 98/42098	PCT	09/24/1998	CRYPTOWORKS, INC.		
	I.C.A./		WO 99/49615	PCT	09/30/1999	MICROTOME	
Examiner Signature	/Charles Agwumezie/			Date Considered	05/22/2007		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, <i>et al.</i>
				Art Unit	2131
Examiner Name	Not Yet Assigned				
Sheet	4	of	10	Attorney Docket Number	111325-127 (021100)

U.S. PATENT DOCUMENTS					
Examiner Initials ¹	Cite No. ²	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ³ (if known)			
I.C.A./		US-5,337,357	08/09/1994	Chou et al.	
		US-5,339,091	08/16/1994	Yamazaki et al.	
		US-5,341,429	08/23/1994	Stringer et al.	
		US-5,347,579	09/13/1994	Blandford	
		US-5,381,526	01/10/1995	Ellson	
		US-5,394,469	02/28/1995	Nagel et al.	
		US-5,410,598	04/25/1995	Shear	
		US-5,412,717	05/02/1995	Fischer	
		US-5,428,606	06/27/1995	Moskowitz	
		US-5,432,849	07/11/1995	Johnson et al.	
		US-5,438,508	08/01/1995	Wyman	
		US-5,444,779	08/22/1995	Daniele	
		US-5,453,601	09/26/1995	Rosen	
		US-5,455,953	10/03/1995	Russell	
		US-5,457,746	10/10/1995	Dolphin	
		US-5,473,687	12/05/1995	Lipscomb et al.	
		US-5,473,692	12/05/1995	Davis	
		US-5,499,298	03/12/1996	Narasimhalu et al.	
		US-5,502,766	03/26/1996	Boebert et al.	
		US-5,504,814	04/02/1996	Miyahara	

FOREIGN PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ²	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature	/Charles Agwumezie/	Date Considered	05/22/2007
-----------------------	---------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, <i>et al.</i>
				Art Unit	2131
Examiner Name				Not Yet Assigned	
Sheet	5	of	10	Attorney Docket Number	
				111325-127 (021100)	

U.S. PATENT DOCUMENTS					
Examiner Initials [*]	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
/C.A./		US-5,504,818	04/02/1996	Okano	
		US-5,504,837	04/02/1996	Griffeth et al.	
		US-5,509,070	04/16/1996	Schull	
		US-5,530,235	06/25/1996	Stefik et al.	
		US-5,532,920	07/02/1996	Hartrick et al.	
		US-5,534,975	07/09/1996	Stefik et al.	
		US-5,539,735	07/23/1996	Moskowitz	
		US-5,563,946	10/08/1996	Cooper et al.	
		US-5,568,552	10/22/1996	Davis	
		US-5,621,797	04/15/1997	Rosen	
		US-5,629,980	05/13/1997	Stefik et al.	
		US-5,633,932	05/27/1997	Davis et al.	
		US-5,634,012	05/27/1997	Stefik et al.	
		US-5,638,443	06/10/1997	Stefik et al.	
		US-5,649,013	07/15/1997	Stuckey et al.	
		US-5,655,077	08/05/1997	Jones et al.	
		US-5,708,717	01/13/1998	Alasia	
		US-5,734,823	03/31/1998	Saigh et al.	
/C.A./		US-5,734,891	03/31/1998	Saigh	
		US-5,737,413	04/07/1998	Akiyama et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials [*]	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³ Number ⁴ Kind Code ² (if known)				

Examiner Signature	/Charles Agwumezie/	Date Considered	05/22/2007
-----------------------	---------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, et al.
				Art Unit	2131
				Examiner Name	Not Yet Assigned
Sheet	6	of	10	Attorney Docket Number	111325-127 (021100)

U.S. PATENT DOCUMENTS					
Examiner Initials [*]	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
/C.A./ ↓ V /C.A./		US-5,737,416	04/07/1998	Cooper et al.	
		US-5,745,569	04/28/1998	Moskowitz et al.	
		US-5,748,783	05/05/1998	Rhoads	
		US-5,757,907	05/26/1998	Cooper et al.	
		US-5,761,686	06/02/1998	Bloomberg	
		US-5,765,152	06/09/1998	Erickson	
		US-5,768,426	06/16/1998	Rhoads	
		US-5,825,892	10/20/1998	Braudaway et al.	
		US-5,892,900	04/06/1999	Ginter et al.	
		US-5,910,987	06/08/1999	Ginter et al.	
		US-5,915,019	06/22/1999	Ginter et al.	
		US-5,917,912	06/29/1999	Ginter et al.	
		US-5,920,861	07/06/1999	Hall et al.	
		US-5,940,504	08/17/1999	Griswold	
		US-5,943,422	08/24/1999	Van Wie et al.	
		US-5,949,876	09/07/1999	Ginter et al.	
		US-5,982,891	11/09/1999	Ginter et al.	
		US-5,999,949	12/07/1999	Crandall	
		US-6,047,067	04/04/2000	Rosen	
		US-6,112,181	08/29/2000	Shear et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials [*]	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)		

Examiner Signature	/Charles Agwumezie/	Date Considered	05/22/2007
-----------------------	---------------------	--------------------	------------

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, <i>et al.</i>
				Group Art	2131
				Examiner Name	Not Yet Assigned
				Attorney Docket Number	111325-127 (021100)
Sheet	7	of	10		

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
/C.A./		US-6,115,471	09/05/2000	Oki et al.	
		US-6,138,119	10/24/2000	Hall et al.	
		US-6,157,721	12/05/2000	Shear et al.	
		US-6,185,683	02/06/2001	Ginter et al.	
		US-6,226,618	05/01/2001	Downs et al.	
		US-6,233,684	05/15/2001	Stefik et al.	
		US-6,237,786	05/29/2001	Ginter et al.	
		US-6,240,185	05/29/2001	Van Wie et al.	
		US-6,253,193	06/26/2001	Ginter et al.	
		US-6,266,618	05/01/2001	Downs, et al.	
		US-6,292,569	09/18/2001	Shear et al.	
		US-6,301,660	10/09/2001	Benson	
		US-6,327,652	12/04/2001	England et al.	
		US-6,330,670	12/11/2001	England et al.	
		US-6,345,256	02/05/2002	Milsted et al.	
		US-6,363,488	05/26/2002	Ginter et al.	
/C.A./		US-6,389,402	05/14/2002	Ginter et al.	

[illegible]

Examiner Signature	/Charles Agwumezie/	Date Considered	05/22/2007
-----------------------	---------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, et al.
				Art Unit	2131
				Examiner Name	Not Yet Assigned
Sheet	8	of	10	Attorney Docket Number	111325-127 (021100)

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
/C.A./		"National Semiconductor and EPR Partner for Information Metering/Data Security Cards" March 4, 1994, Press Release from Electronic Publishing Resources, Inc.	
		Weber, R., "Digital Rights Management Technology" October 1995	
		Flasche, U. et al., "Decentralized Processing of Documents", pp. 119-131, 1986, Comput. & Graphics, Vol. 10, No. 2	
		Mori, R. et al., "Superdistribution: The Concept and the Architecture", pp. 1133-1146, 1990. The Transactions of the IEICE, Vo. E 73, No. 7, Tokyo, JP	
		Weber, R., "Metering Technologies for Digital Intellectual Property", pp. 1-29, Oct. 1994, A Report to the International Federation of Reproduction Rights Organizations	
		Clark, P.C. et al., "Bits: A Smartcard protected Operating System", pp. 66-70 and 94, November 1994, Communications of the ACM, Vol. 37, No. 11	
		Ross, P.E., "Data Guard", pp. 101, June 6, 1994, Forbes	
		Saigh, W.K., "Knowledge is Sacred", 1992, Video Pocket/Page Reader Systems, Ltd.	
		Kahn, R.E., "Deposit, Registration and Recordation in an Electronic Copyright Management System", pp. 1-19, August 1992, Corporation for National Research Initiatives, Virginia	
		Hilts, P. et al., "Books While U Wait", pp. 48-50, January 3, 1994, Publishers Weekly	
↓ /C.A./		Strattner, A., "Cash Register on a Chip may Revolutionize Software Pricing and Distribution; Wave Systems Corp.", pp. 1-3, April 1994, Computer Shopper, Vol. 14, No. 4, ISSN 0886-0556	

Examiner Signature	/Charles Agwumezie/	Date Considered	05/22/2007
--------------------	---------------------	-----------------	------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known		
				Application Number	10/773,306	
				Filing Date	February 9, 2004	
				First Named Inventor	Mark J. STEFIK, <i>et al.</i>	
				Art Unit	2131	
Examiner Name	Not Yet Assigned					
Sheet	9	of	10	Attorney Docket Number	111325-127 (021100)	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials [*]	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
/C.A./		O'Conner, M., "New Distribution Option for Electronic Publishers; iOpener Data Encryption and Metering System for CD-ROM use; Column", pp. 1-6, March 1994, CD-ROM Professional, Vol. 7, No. 2, ISSN: 1409-0833	
		Willett, S., "Metered PCs: Is Your System Watching You? Wave System beta tests new technology", pp. 84, May 2, 1994, InfoWorld	
		Linn, R., "Copyright and Information Services in the Context of the National Research and Education Network", pp. 9-20, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Perrit, Jr., H., "Permission Headers and Contract Law", pp. 27-48, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Upthegrove, L., "Intellectual Property Header Descriptors: A Dynamic Approach", pp. 63-66, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Sirbu, M., "Internet Billing Service Design and prototype Implementation", pp. 67-80, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Simmell, S. et al., "Metering and Licensing of Resources: Kala's General Purpose Approach", pp. 81-110, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Kahn, R., "Deposit, Registration and Recordation in an Electronic Copyright Management System", pp. 111-120, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
/C.A./		Tygar, J. et al., "Dyad: A System for Using Physically Secure Coprocessors", pp. 121-152, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Griswold, G., "A Method for Protecting Copyright on Networks", pp. 169-178, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	

Examiner Signature	/Charles Agwumezie/	Date Considered	05/22/2007
--------------------	---------------------	-----------------	------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				<i>Complete if Known</i>	
				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, et al.
				Art Unit	2131
Examiner Name	Not Yet Assigned				
Sheet	10	of	10	Attorney Docket Number	111325-021100)

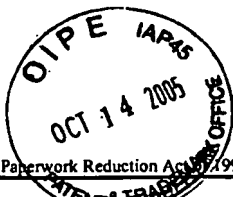
OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials [*]	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
/C.A./		Nelson, T., "A Publishing and Royalty Model for Networked Documents", pp. 257-259, January 1994, IMA Intellectual Property Project Proceedings, Vol. 1, Issue 1	
		Robinson, E., "Redefining Mobile Computing", pp. 238-240, 247-248 and 252, July 1993, PC Computing	
		Abadi, M. et al., "Authentication and Delegation with Smart-cards", PP. 1-24, 1990, Research Report DEC Systems Research Center	
		Mark Stefik, "Letting Loose the Light: Igniting Commerce in Electronic Publication", pp. 219-253, 1996, Internet Dreams: Archetypes, Myths, and Metaphors, IDSN 0-262-19373-6	
		Mark Stefik, "Letting Loose the Light: Igniting Commerce in Electronic Publication", pp. 2-35, February 8, 1995, Internet Dreams: Archetypes, Myths and Metaphors.	
/C.A./		Henry H. Perritt, Jr., "Technological Strategies for Protecting Intellectual Property in the Networked Multimedia Environment", April 2-3, 1993, Knowbots, Permissions Headers & Contract Law	

Examiner Signature	/Charles Agwumezie/	Date Considered	05/22/2007
--------------------	---------------------	-----------------	------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, et al.
				Art Unit	2131
				Examiner Name	Not Yet Assigned
Sheet	1	of	1	Attorney Docket Number	111325-127 (021100)

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)				
/C.A./		6,135,646		October 24, 2000	Kahn et al.	

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³	Number ⁴ Kind Code ⁵ (if known)				

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁴

Examiner Signature	/Charles Agwumezie/	Date Considered	05/22/2007
-----------------------	---------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Notice of References Cited	Application/Control No. 10/773,306	Applicant(s)/Patent Under Reexamination STEFIK ET AL.	
	Examiner Charlie C. Agwumezie	Art Unit 3621	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-5,917,912	06-1999	Ginter et al.	713/187
*	B	US-5,473,687	12-1995	Lipscomb et al.	705/51
*	C	US-4,891,838	01-1990	Faber, Lawrence M.	726/5
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Perritt, Henry H. 'Knowbots, Permissions Headers and Contract Law' (30 April 1993)
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov



Bib Data Sheet

CONFIRMATION NO. 6652

SERIAL NUMBER 10/773,306	FILING OR 371(c) DATE 02/09/2004 RULE	CLASS 705	GROUP ART UNIT 3621	ATTORNEY DOCKET NO. 021100
------------------------------------	---	---------------------	-------------------------------	--------------------------------------

APPLICANTS
 Mark J. Stefik, Portola Valley, CA;
 Peter L.T. Pirolli, San Francisco, CA; *AN*

**** CONTINUING DATA *******
 This application is a CON of 09/777,966 02/07/2001 PAT 6,944,600 which is a DIV of 08/967,084
 11/10/1997 PAT 6,236,971
 which is a CON of 08/344,760 11/23/1994 ABN *AN*

**** FOREIGN APPLICATIONS *******

IF REQUIRED, FOREIGN FILING LICENSE GRANTED
**** 08/26/2004**

Foreign Priority claimed <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	STATE OR COUNTRY CA	SHEETS DRAWING 13	TOTAL CLAIMS 29 <i>Je</i>	INDEPENDENT CLAIMS 7
---	-------------------------------	-----------------------------	-------------------------------------	--------------------------------


35 USC 119 (a-d) conditions ☐ yes ☐ no ☐ Met after
 met *Allowance*

Verified and Acknowledged
 Examiner's Signature *Cham H. Lee* Initials *AN*

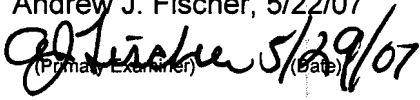
ADDRESS
 22204

TITLE
 System for controlling the distribution and use of digital works utilizing digital tickets

FILING FEE RECEIVED 9856	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:	<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of time) <input type="checkbox"/> 1.18 Fees (Issue) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit
------------------------------------	---	---

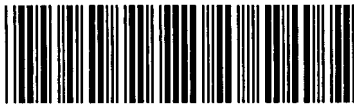
Issue Classification 	Application/Control No.	Applicant(s)/Patent under Reexamination	
	10/773,306	STEFIK ET AL.	
	Examiner	Art Unit	
	Charlie C. Agwumezie	3621	

ISSUE CLASSIFICATION									
ORIGINAL					CROSS REFERENCE(S)				
CLASS		SUBCLASS			CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)			
705		50			705	59			
INTERNATIONAL CLASSIFICATION					707	9			
G	0	6	Q	99/00	709	229			
H	0	4	K	1/00	713	182			
H	0	4	L	9/00					
G	0	6	F	7/00					
G	0	6	F	15/16					

Charlie C.L. Agwumezie, 5/22/07 (Assistant Examiner) (Date)		Andrew J. Fischer, 5/22/07  (Primary Examiner) (Date)	Total Claims Allowed: 36	
Patricia Lewis, 5/22/07 (Legal Instruments Examiner) (Date)			O.G. Print Claim(s) 1	O.G. Print Fig. 1

<input type="checkbox"/> Claims renumbered in the same order as presented by applicant				<input type="checkbox"/> CPA				<input type="checkbox"/> T.D.				<input type="checkbox"/> R.1.47			
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1		31		1		61		121		151		181		
	2		32		2		62		122		152		182		
	3		33		3		63		123		153		183		
	4		34		4		64		124		154	18	184		
	5		35		5		65		125		155	19	185		
	6		36		6		66		126		156	20	186		
	7		37		7		67		127		157	21	187		
	8		38		8		68		128		158	22	188		
	9		39		9		69		129		159	23	189		
	10		40		10		70		130		160	24	190		
	11		41		11		71		131		161	25	191		
	12		42		12		72		132		162	26	192		
	13		43		13		73		133		163	27	193		
	14		44		14		74		134		164	28	194		
	15		45		15		75		135		165	29	195		
	16		46				76		136		166	30	196		
	17		47		16		77		137		167	31	197		
	18		48		17		78		138		168	32	198		
	19		49				79		139		169		199		
	20		50				80		140		170	33	200		
	21		51				81		141		171	34	201		
	22		52				82		142		172	35	202		
	23		53				83		143		173	36	203		
	24		54				84		144		174		204		
	25		55				85		145		175		205		
	26		56				86		146		176		206		
	27		57				87		147		177		207		
	28		58				88		148		178		208		
	29		59				89		149		179		209		
	30		60				90		150		180		210		

Index of Claims



Application/Control No.

10/773,306

Examiner

Charlie C. Agwumezie

Applicant(s)/Patent under Reexamination

STEFIK ET AL.

Art Unit

3621

✓	Rejected
=	Allowed

—	(Through numeral) Cancelled
÷	Restricted

N	Non-Elected
I	Interference

A	Appeal
O	Objected

Claim		Date									
Final	Original	5/22/07									
	1	-									
	2	-									
	3	-									
	4	-									
	5	-									
	6	-									
	7	-									
	8	-									
	9	-									
	10	-									
	11	-									
	12	-									
	13	-									
	14	-									
	15	-									
	16	-									
	17	-									
	18	-									
	19	-									
	20	-									
	21	-									
	22	-									
	23	-									
	24	-									
	25	-									
	26	-									
	27	-									
	28	-									
	29	-									
	30	-									
	31	-									
	32	-									
	33	-									
	34	-									
	35	-									
	36	-									
	37	-									
	38	-									
	39	-									
	40	-									
	41	-									
	42	-									
	43	-									
	44	-									
	45	-									
	46	-									
	47	-									
	48	-									
	49	-									
	50	-									

Claim		Date									
Final	Original										
	51	-									
	52	-									
	53	-									
	54	-									
	55	-									
	56	-									
	57	-									
	58	-									
	59	-									
	60	-									
	61	=									
	62	=									
	63	=									
	64	=									
	65	=									
	66	=									
	67	=									
	68	=									
	69	=									
	70	=									
	71	=									
	72	=									
	73	=									
	74	=									
	75	=									
	76	-									
	77	=									
	78	=									
	79	-									
	80	-									
	81	-									
	82	-									
	83	-									
	84	-									
	85	-									
	86	-									
	87	-									
	88	-									
	89	-									
	90	-									
	91	-									
	92	-									
	93	-									
	94	-									
	95	-									
	96	-									
	97	-									
	98	-									
	99	-									
	100	-									

Claim		Date									
Final	Original										
	101	-									
	102	-									
	103	-									
	104	-									
	105	-									
	106	-									
	107	-									
	108	-									
	109	-									
	110	-									
	111	-									
	112	-									
	113	-									
	114	-									
	115	-									
	116	-									
	117	-									
	118	-									
	119	-									
	120	-									
	121	-									
	122	-									
	123	-									
	124	-									
	125	-									
	126	-									
	127	-									
	128	-									
	129	-									
	130	-									
	131	-									
	132	-									
	133	-									
	134	-									
	135	-									
	136	-									
	137	-									
	138	-									
	139	-									
	140	-									
	141	-									
	142	-									
	143	-									
	144	-									
	145	-									
	146	-									
	147	-									
	148	-									
	149	-									
	150	-									

Index of Claims (continued)



Application/Control No.

10/773,306

Examiner

Charlie C. Agwumezie

Applicant(s)/Patent under Reexamination

STEFIK ET AL.

Art Unit

3621

√	Rejected
=	Allowed

—	(Through numeral) Cancelled
+	Restricted

N	Non-Elected
I	Interference

A	Appeal
O	Objected

Claim		Date											
Final	Original	5/22/07											
	151	-											
	152	-											
	153	-											
	154	-											
	155	-											
	156	-											
	157	-											
	158	-											
	159	-											
	160	-											
	161	-											
	162	-											
	163	-											
	164	-											
	165	-											
	166	-											
	167	-											
	168	-											
	169	-											
	170	-											
	171	-											
	172	-											
	173	-											
	174	-											
	175	-											
	176	-											
	177	-											
	178	-											
	179	-											
	180	-											
	181	-											
	182	-											
	183	-											
	184	=											
	185	=											
	186	=											
	187	=											
	188	=											
	189	=											
	190	=											
	191	=											
	192	=											
	193	=											
	194	=											
	195	=											
	196	=											
	197	=											
	198	=											
	199	-											
	200	=											

Claim		Date											
Final	Original												
	201	=											
	202	=											
	203	=											
	204												
	205												
	206												
	207												
	208												
	209												
	210												
	211												
	212												
	213												
	214												
	215												
	216												
	217												
	218												
	219												
	220												
	221												
	222												
	223												
	224												
	225												
	226												
	227												
	228												
	229												
	230												
	231												
	232												
	233												
	234												
	235												
	236												
	237												
	238												
	239												
	240												
	241												
	242												
	243												
	244												
	245												
	246												
	247												
	248												
	249												
	250												

Claim		Date											
Final	Original												
	251												
	252												
	253												
	254												
	255												
	256												
	257												
	258												
	259												
	260												
	261												
	262												
	263												
	264												
	265												
	266												
	267												
	268												
	269												
	270												
	271												
	272												
	273												
	274												
	275												
	276												
	277												
	278												
	279												
	280												
	281												
	282												
	283												
	284												
	285												
	286												
	287												
	288												
	289												
	290												
	291												
	292												
	293												
	294												
	295												
	296												
	297												
	298												
	299												
	300												

Search Notes

Application/Control No.

10/773,306

Examiner

Charlie C. Agwumezie

Applicant(s)/Patent under
Reexamination

STEFIK ET AL.

Art Unit

3621

SEARCHED

Class	Subclass	Date	Examiner
705	50, 51, 57, 59	5/22/2007	ACC
707	9, 104.1	5/22/2007	ACC
709	229	5/22/2007	ACC
713	182	5/22/2007	ACC

INTERFERENCE SEARCHED

Class	Subclass	Date	Examiner
same as	above	5/22/2007	ACC

**SEARCH NOTES
(INCLUDING SEARCH STRATEGY)**

	DATE	EXMR
Applicant's IDS	5/22/2007	ACC
BRS Keyword searches including forward/backward searches	5/22/2007	ACC
STIC NPL Database searches	5/22/2007	ACC
STIC PLUS	5/22/2007	ACC
Consulted Kambiz Abdi	5/22/2007	ACC
Allowable subject matter granted by James Reagan on final action of 10/04/06	5/22/2007	ACC



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

BIBDATASHEET

Bib Data Sheet

CONFIRMATION NO. 6652

SERIAL NUMBER 10/773,306	FILING OR 371(c) DATE 02/09/2004 RULE	CLASS 705	GROUP ART UNIT 3621	ATTORNEY DOCKET NO. 021100
APPLICANTS Mark J. Stefik, Portola Valley, CA; Peter L.T. Pirolli, San Francisco, CA;				
** CONTINUING DATA ***** This application is a CON of 09/777,966 02/07/2001 PAT 6,944,600 which is a DIV of 08/967,084 11/10/1997 PAT 6,236,971 which is a CON of 08/344,760 11/23/1994 ABN				
** FOREIGN APPLICATIONS *****				
IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 08/26/2004				
Foreign Priority claimed <input type="checkbox"/> yes <input checked="" type="checkbox"/> no 35 USC 119 (a-d) conditions <input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Met after met Allowance Verified and Acknowledged _____ Examiner's Signature Initials		STATE OR COUNTRY CA	SHEETS DRAWING 13	TOTAL CLAIMS 39
INDEPENDENT CLAIMS 7				
ADDRESS 22204				
TITLE CONTENT RENDERING APPARATUS				
FILING FEE RECEIVED 9856	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of time) <input type="checkbox"/> 1.18 Fees (Issue) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

7-2-07

U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No. ^a	U.S. Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number - Kind Code ^b (if known)					
I.C.A./		US-5,138,712		08/11/1992	Corbin		
|		US-5,146,499		09/08/1992	Geffrotin		
|		US-5,148,481		09/15/1992	Abraham et al.		
|		US-5,159,182		10/27/1992	Eisele		
|		US-5,183,404		02/02/1993	Aldous et al.		
|		US-5,191,193		03/02/1993	Le Roux		
|		US-5,224,163		06/29/1993	Gasser et al.		
|		US-5,204,897		04/20/1993	Wyman		
|		US-5,222,134		06/22/1993	Waite et al.		
|		US-5,229,263		03/29/1994	Beller et al.	5,299,263	
|		US-5,235,642		08/10/1993	Wobber et al.		
|		US-5,247,575		09/21/1993	Sprague et al.		
|		US-5,255,106		10/19/1993	Castro		
|		US-5,260,999		11/09/1993	Wyman		
|		US-5,263,157		11/16/1993	Janis		
|		US-5,263,158		11/16/1993	Janis		
|		US-5,276,444		01/04/1994	McNair		
|		US-5,276,735		01/04/1994	Boebert et al.		
|		US-5,291,596		03/01/1994	Mita		
V		US-5,301,231		04/05/1994	Abraham et al.		
|		US-5,311,591		05/10/1994	Fischer		
I.C.A./		US-5,319,705		06/07/1994	Halter et al.		
FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ^a	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ^c
		Country Code ^b Number ^d	Kind Code ^e (if known)				
I.C.A./		WO 93/01550	PCT	01/21/1993	INFOLOGIC SOFTWARE, INC		
|		WO 94/01821	PCT	01/20/1994	SECURE COMPUTING CORP.		
|		WO 96/24092	PCT	08/08/1996	BENSON, Greg		
|		WO 97/48203	PCT	12/18/1997	INTEL CORP.		
V		WO 98/11690	PCT	03/19/1998	GLOVER, John J.		
|		WO 98/42098	PCT	09/24/1998	CRYPTOWORKS, INC.		
I.C.A./		WO 99/49615	PCT	09/30/1999	MICROTOME		
Examiner Signature	/Charles Agwumezie/				Date Considered	05/22/2007	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/773,306
				Filing Date	February 9, 2004
				First Named Inventor	Mark J. STEFIK, <i>et al.</i>
				Group Art	2131
				Examiner Name	Not Yet Assigned
				Attorney Docket Number	111325-127 (021100)
Sheet	7	of	10		

		U.S. PATENT DOCUMENTS			
Examiner Initials*	Cite No.†	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code* (if known)			
IC.A./		US-6,115,471	09/05/2000	Oki et al.	
		US-6,138,119	10/24/2000	Hall et al.	
		US-6,157,721	12/05/2000	Shear et al.	
		US-6,185,683	02/06/2001	Ginter et al.	
		US-6,226,618	05/01/2001	Downs et al.	
		US-6,233,684	05/15/2001	Stefik et al.	
		US-6,237,786	05/29/2001	Ginter et al.	
		US-6,240,185	05/29/2001	Van Wie et al.	
		US-6,253,193	06/26/2001	Ginter et al.	
		US-6,266,618	05/01/2001	Downs, et al. 6, 226, 618	
		US-6,292,569	09/18/2001	Shear et al.	
		US-6,301,660	10/09/2001	Benson	
		US-6,327,652	12/04/2001	England et al.	
		US-6,330,670	12/11/2001	England et al.	
		US-6,345,256	02/05/2002	Milsted et al.	
		US-6,363,488 3	05/26/2002	Ginter et al.	
IC.A./		US-6,389,402	05/14/2002	Ginter et al.	

[illegible]

Examiner Signature	/Charles Agwumezie/	Date Considered	05/22/2007
-----------------------	---------------------	--------------------	------------

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

BIBDATASHEET

CONFIRMATION NO. 6652

Bib Data Sheet

SERIAL NUMBER 10/773,306	FILING OR 371(c) DATE 02/09/2004 RULE	CLASS 705	GROUP ART UNIT 3621	ATTORNEY DOCKET NO. 021100
APPLICANTS Mark J. Stefik, Portola Valley, CA; Peter L.T. Pirolli, San Francisco, CA; Ralph C. Merkle, Sunnyvale, CA;				
** CONTINUING DATA ***** This application is a CON of 09/777,966 02/07/2001 PAT 6,944,600 which is a DIV of 08/967,084 11/10/1997 PAT 6,236,971 which is a CON of 08/344,760 11/23/1994 ABN				
** FOREIGN APPLICATIONS *****				
IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 08/26/2004				
Foreign Priority claimed <input type="checkbox"/> yes <input checked="" type="checkbox"/> no 35 USC 119 (a-d) conditions <input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Met after met Allowance Verified and Acknowledged Examiner's Signature _____ Initials _____		STATE OR COUNTRY CA	SHEETS DRAWING 13	TOTAL CLAIMS 39
INDEPENDENT CLAIMS 7				
ADDRESS 22204				
TITLE CONTENT RENDERING APPARATUS				
FILING FEE RECEIVED 9856	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of time) <input type="checkbox"/> 1.18 Fees (Issue) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(use as many sheets as necessary)

Sheet 1 of 10

Complete if Known

Application Number	10/773,306
Filing Date	February 9, 2004
First Named Inventor	Mark J. STEFIK, et al.
Art Unit	2131
Examiner Name	Not Yet Assigned
Attorney Docket Number	111325-127 (021100)

U.S. PATENT DOCUMENTS

Examiner Initials [*]	Cite No. ¹	U.S. Patent Document Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
IC.A./		US-3,263,158	07/01/1996	Janis Borgen et al.	
		US-3,609,697	09/28/1971	Blevins et al.	
		US-3,790,700	02/05/1974	Callais et al.	
		US-3,798,605	03/19/1974	Feistel	
		US-4,159,468	06/26/1979	Barnes et al.	
		US-4,220,991	09/02/1980	Hamano et al.	
		US-4,278,837	07/14/1981	Best	
		US-4,323,921	04/06/1982	Guillou	
		US-4,442,486	04/10/1984	Mayer	
		US-4,529,870	07/16/1985	Chaum	
		US-4,558,176	12/10/1985	Arnold et al.	
		US-4,593,376	06/03/1986	Volk	
		US-4,614,861	09/30/1986	Pavlov et al.	
		US-4,644,493	02/17/1987	Chandra et al.	
		US-4,658,093	04/14/1987	Hellman	
		US-4,713,753	12/15/1987	Beobert et al.	
		US-4,796,220	01/03/1989	Wolfe	
		US-4,817,140	03/28/1989	Chandra et al.	
		US-4,827,508	05/02/1989	Shear	
IC.A./		US-4,868,376	09/19/1989	Lessin et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials [*]	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
IC.A./		0 084 441 EP	07/27/1983	TABS LIMITED		
		0 180 460 EP	05/07/1986	SONY CORPORATION		
		0 332 707 EP	09/01/1989	HONDA GIKEN KOGYO KABUSHIKI KAISHA		
		0 538 216 A1 EP	04/21/1993	TELEVERKET		
		0 651 554 EP	05/03/1995	EASTMAN KODAK CO.		
		0 668 695 EP	08/23/1995	VICTOR COMPANY OF JAPAN LIMITED		
		0 725 376 EP	08/07/1996	SONY CORP.		
		2 136 175 GB	09/12/1984	ATALLA CORP.		
		2 236 604 GB	04/10/1991	SUN MICROSYSTEMS INC		
		0 715 241 JP	06/05/1996	MITSUBISHI CORP.		
IC.A./		04-369068 JP	12/21/1992	CHIYUUBU NIHON DENKI SOFUTOU EA KK		Abst

Examiner Signature: /Charles Agwumezie/ Date Considered: 05/22/2007

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

JUL 30 2007 6:30PM

866 741 0075

NO. 0775 P. 2/3



JUL 30 2007 2:19PM

NIXON PEABODY

NO. 7748 P. 3

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or FAX (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 3 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Block 1 for any change of address)

2204 7390
 NIXON PEABODY, LLP
 401 9TH STREET, NW
 SUITE 900
 WASHINGTON, DC 20004-2128

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmittal.

Certificate of Mailing or Transmittal
 I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted transmitted to the USPTO (571) 273-2885, on the date indicated below.

Deborah Movahhedi (Date/Initial/Name)
 Deborah Movahhedi (Signature)
 July 30, 2007 (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,306	02/09/2004	Mark J. Stuflik	021100	6652

TITLE OF INVENTION: SYSTEM FOR CONTROLLING THE DISTRIBUTION AND USE OF DIGITAL WORKS UTILIZING DIGITAL TICKETS

APPL. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$0	\$1700	09/13/2007

EXAMINER	ART UNIT	CLASS-SUBCLASS
AGWUMZIE, CHARLES C	3621	705-050000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" indication form PTO/SB/47 Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. Fee printing on the patent front page, list
 (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
 Marc S. Kaufman
 Carlos Villanar
 NIXON PEABODY LLP

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

ContentGuard Holdings, Inc.

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)

Wilmington, DELAWARE
 01 FC:1501 1400.00 DA
 FC:1504 300.00 DA
 FC:8001 30.00 DA

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☒ Issue Fee
☒ Publication Fee (No small entity discount permitted)
☒ Advance Order - # of Copies 10

4b. Payment of Fee(s): (Please first respay any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card, Form PTO-2038 is attached.
☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number 19-2380. (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(a)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature

Typed or printed name: Marc S. Kaufman

Date: July 30, 2007

Registration No. 35,212

This collection of information is required by 37 CFR 1.31. The information is required to obtain or retain a benefit by the public which is in the public interest and by the USPTO to process an application. Confidentiality is governed by 35 U.S.C. 32 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 07/06) Approved for use through 06/30/2007.

OMB 0651-0033

U.S. Patent and Trademark Office U.S. DEPARTMENT OF COMMERCE

JUL 30 2007 6:31PM

866 741 0075

NO. 0775 P. 3/3

JUL 30 2007 2:20PM

NIXON PEABODY

NO. 7748

P. 4



- 1 -

Docket No. 111325-021100

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

) Confirmation No.: 6632

Mark J. STEPIK, et al.

) Group Art Unit: 3621

Serial No. 10/773,306

) Examiner: Charles C. Agwumazie

Filed: February 9, 2004

)

For: SYSTEM FOR CONTROLLING THE
DISTRIBUTION AND USE ... DIGITAL TICKETS

)

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR
1.9(a)]I hereby certify that this correspondence is being or being deemed
transmitted to the USPTO at 371-272-2885, on July 30, 2007.

Signature:

Name: Deborah Movahhedi

COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCEMail Stop IF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants note that the Statement of Reasons for Allowance indicates that the "invention discloses an apparatus for rendering digital content" However, Applicants note that independent claim 184, and claims depending from claim 184, are directed to a method. Accordingly, claim 184 does not recite the stated "means" elements of apparatus claim 61 but discloses corresponding method steps. Therefore, the prior art fails to teach or suggest the claimed method steps recited in claim 184.

Respectfully submitted,

NIXON PEABODY, LLP

Date:

7-30-07

Mare S. Kaufman, Reg. No. 35,212

NIXON PEABODY LLP
CUSTOMER NO.: 22204
401 9th Street, N.W., Suite 900
Washington, DC 20004
Tel: 202-585-8400
Fax: 202-585-8080

1066/104.1

JUL. 30. 2007 6:30PM

866 741 0075

NO. 0775 P. 1/3



JUL. 30. 2007 2:19PM

NIXON PEABODY

NO. 7748 P. 2

Nixon Peabody LLP
Attorneys at Law

Suite 900
401 9th Street, N.W.
Washington, D.C. 20004-2128
(202) 585-8000

Fax: (202) 585-8080

PRIVILEGE AND CONFIDENTIALITY NOTICE

The information in this fax is intended for the named recipients only. It contains privileged and confidential matter. If you have received this fax in error, please notify us immediately by a collect telephone call to (202) 585-8000 and return the original to the sender by mail. We will reimburse you for postage. Do not disclose the contents to anyone. Thank you.

FAX

Date: July 30, 2007 **Pages (including cover):** 3
To: Issue/Publication Fee Branch **Fax:** 571-273-2885 **Ph:**
From: Marc S. Kaufman, Reg. No. 35,212 **Docket No.** 111325-21100
Message: The following documents are being presented for facsimile filing in the United States Patent and Trademark Office:

1. Notice of Allowance and Issue Fee Transmittal - Part B (PTOL-85)
2. Permission to charge the Deposit Account No. 19-2380 in the amount of \$1730.00 representing \$1400.00 for Issue Fee, \$300.00 for publication fee, and \$30.00 for Advance Order of 10 Patent Copies.
3. Comments on Statement of Reasons for Allowance.

In re Patent Application of
Inventor(s): Mark J. STEFIK et al.
Application No. 10/773,308

Filed: February 9, 2004

For: SYSTEM FOR CONTROLLING THE DISTRIBUTION AND USE OF DIGITAL WORKS
UTILIZING DIGITAL TICKETS

Due Date: September 13, 2007

Docket Number: 111325-21100

MSK/dam

CERTIFICATE OF FACSIMILE TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is being facsimile transmitted to the USPTO at 571-273-2885, on July 30, 2007.

Signature:
Name:

Deborah Movahhedi
Deborah Movahhedi

10667790.1



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,306	09/11/2007	7269576	021100	6652

22204 7590 08/22/2007
NIXON PEABODY, LLP
401 9TH STREET, NW
SUITE 900
WASHINGTON, DC 20004-2128

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment is 239 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Mark J. Stefik, Portola Valley, CA;
Peter L.T. Pirolli, San Francisco, CA;
Ralph C. Merkle, Sunnyvale, CA;

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(b).

I hereby appoint:



Practitioners associated with the Customer Number:

98804

OR



Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used).

Name	Registration Number	Name	Registration Number

as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(b) to:



The address associated with Customer Number:

98804

OR



Firm or Individual Name

Address			
City	State		Zip
Country			
Telephone		Email	

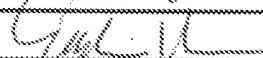
Assignee Name and Address:

ContentGuard Holdings, Inc.
222 N. Sepulveda Blvd., Suite 1400
El Segundo, CA 90245

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature		Date	9/16/2010
Name	Eddie Chen	Telephone	
Title	Chief Technology Officer		

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: MARK J. STEFIK, et al.

Application No./Patent No.: 08/967,084 Filed/Issue Date: 11-10-1997

Titled: **SYSTEM FOR CONTROLLING THE DISTRIBUTION AND USE OF DIGITAL WORKS USING DIGITAL TICKETS**

CONTENTGUARD HOLDINGS, INC., a Corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest in;
2. ☐ an assignee of less than the entire right, title, and interest in
(The extent (by percentage) of its ownership interest is _____ %); or
3. ☐ the assignee of an undivided interest in the entirety of (a complete assignment from one of the joint inventors was made)

the patent application/patent identified above, by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 011122, Frame 0204, or for which a copy therefore is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

2. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☒ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/Stephen M. Hertzler, Reg. No. 58,247/

Signature

2010-09-16

Date

Stephen M. Hertzler, Reg. No. 58,247

Printed or Typed Name

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt

EFS ID:	8554846
Application Number:	10773306
International Application Number:	
Confirmation Number:	6652
Title of Invention:	CONTENT RENDERING APPARATUS
First Named Inventor/Applicant Name:	Mark J. Stefik
Customer Number:	22204
Filer:	Stephen M. Hertzler
Filer Authorized By:	
Attorney Docket Number:	111325-021100
Receipt Date:	05-OCT-2010
Filing Date:	09-FEB-2004
Time Stamp:	12:02:39
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
------------------------	----

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	021100_-_2010-10-05_- _Authorization_Statement.pdf	407008 01ab114e39275dc6ed116c6a0a5e5b8130820f04	no	1

Warnings:

Information:

2	Power of Attorney	021100_-_2010-10-05_-_POA.pdf	1217636 e6ce4e7be6e5cb0ed814e488d50f9a970815e583	no	2
Warnings:					
Information:					
3	Assignee showing of ownership per 37 CFR 3.73(b).	021100_-_2010-10-05_-_Statement_under_37_CFR_373.pdf	413936 64ca835f087405a0dd7375f4856349e299cd5f4	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			2038580		
<p>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</p> <p><u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p> <p><u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</p>					

AUTHORIZATION TO ACT ON BEHALF OF THE ASSIGNEE

UNDER 37 CFR 3.73(b)(2)(i)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The practitioners associated with Customer Number 98804 have been authorized (or empowered) to act on behalf of ContentGuard Holdings, Inc. before the United States Patent and Trademark Office (i.e. to sign the enclosed submission on behalf of the assignee), pursuant to 37 CFR 3.73(b)(2)(i).

If any additional information is required in this regard, please contact the undersigned as soon as possible.

Respectfully submitted,

Date: September 16, 2010

/Stephen M. Hertzler, Reg. No. 58,247/
Stephen M. Hertzler
Registration No. 58,247

REED SMITH LLP
CUSTOMER NO.: 98804
1301 K Street N.W.
Suite 1100 – East Tower
Washington, D.C. 20005



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
10/773,306	02/09/2004	Mark J. Stefik	111325-021100

CONFIRMATION NO. 6652

POWER OF ATTORNEY NOTICE



22204
NIXON PEABODY, LLP
401 9TH STREET, NW
SUITE 900
WASHINGTON, DC 20004-2128

Date Mailed: 10/13/2010

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 10/05/2010.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

/sleutchit/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
10/773,306	02/09/2004	Mark J. Stefik	111325-021100

98804
Reed Smith LLP
P.O. Box 488
Pittsburgh, PA 15230

CONFIRMATION NO. 6652
POA ACCEPTANCE LETTER



Date Mailed: 10/13/2010

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 10/05/2010.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/sleutchit/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

**The United States Patent and Trademark Office
PATENT TRIAL AND APPEAL BOARD**



A petition has been filed in Patent Number 7,269,576 on 2/14/2013.

The Case Number is IPR2013-00139.

To view the documents filed in this petition, go to www.uspto.gov/ptab and click on the Direct Link.

Click on Search for a proceeding / Browse the proceedings and enter the Patent Number or the Trial or Case Number and select the Search button.

Questions regarding this notice should be directed to the Patent Trial and Appeal Board at 571-272-7822.

Trials@uspto.gov
571-272-7822

Paper 15
Entered: July 9, 2013

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ZTE CORPORATION AND ZTE (USA) INC.
Petitioners

v.

CONTENTGUARD HOLDINGS, INC.
Patent Owner

Case IPR2013-00139
Patent 7,269,576

Before JAMESON LEE, MICHAEL W. KIM, and MICHAEL R. ZECHER,
Administrative Patent Judges.

LEE, *Administrative Patent Judge.*

DECISION
Institution of *Inter Partes* Review
37 C.F.R. § 42.108

Case IPR2013-00139
Patent 7,269,576

I. INTRODUCTION

ZTE Corporation and ZTE (USA) Inc. (“ZTE”) filed a petition requesting an *inter partes* review of claims 1-36 of U.S. Patent No. 7,269,576 (Ex. 1001, “the ’576 patent”). (Paper 2.) ZTE also filed a corrected petition. (Paper 9, “Pet.”) The patent owner, ContentGuard Holdings, Inc. (“ContentGuard”) filed a preliminary response. (Paper 14, “Prel. Resp.”) We have jurisdiction under 35 U.S.C. § 314.

The standard for instituting an *inter partes* review is set forth in 35 U.S.C. § 314(a) which provides as follows:

THRESHOLD -- The Director may not authorize an *inter partes* review to be instituted unless the Director determines that the information presented in the petition filed under section 311 and any response filed under section 313 shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.

Upon consideration of the corrected petition and ContentGuard’s preliminary response, we determine that the information presented by ZTE establishes that there is a reasonable likelihood that ZTE would prevail in showing the unpatentability of claims 18-21, 25-28, and 31-36 of the ’576 patent. Accordingly, we grant the petition and only institute an *inter partes* review of claims 18-21, 25-28, and 31-36 of the ’576 patent.

A. Related Proceedings

ZTE indicates that the ’576 patent is involved in co-pending litigation captioned *ContentGuard Holdings Inc. v. ZTE Corp. et al.*, Case No. 3:12-cv-01226 (S.D. Cal.). (Pet. 1.)

Case IPR2013-00139
Patent 7,269,576

ZTE also filed five other petitions seeking *inter partes* review of the following patents: U.S. Patent No. 7,523,072 (IPR2013-00133); U.S. Patent No. 7,225,160 (IPR2013-00134); U.S. Patent No. 7,359,884 (IPR2013-00136); U.S. Patent No. 6,963,859 (IPR2013-00137); and U.S. Patent No. 7,139,736 (IPR2013-00138). (Pet. 1.)

B. The '576 Patent

The subject matter of the '576 patent relates to the distribution of digitally encoded works and the enforcement of usage rights. (Ex. 1001, 1:5-6.) According to the '576 patent, an issue facing the publishing and information industries is how to prevent the unauthorized and unaccounted distribution or usage of electronically published materials. (Ex. 1001, 1:10-13.) In particular, a major concern, according to the '576 patent, is the ease with which electronically published works can be "perfectly" reproduced and distributed. (Ex. 1001, 1:24-25.) According to the '576 patent, one way to curb unaccounted distribution is to prevent unauthorized copying and transmission. (Ex. 1001, 1:44-46.) Another way, according to the '576 patent, is to distribute software which requires a "key" to enable its use. (Ex. 1001, 1:60-61.) The '576 patent discloses that while such distribution and protection schemes prevent unauthorized distributions, they do so by sacrificing the potential for subsequent revenue bearing uses. (Ex. 1001, 2:56-60.) For example, the '576 patent discloses that it may be desirable to allow the lending of a purchased work to permit exposure of the work to potential buyers, permit the creation of a derivative work for a fee, or permit copying the work for a fee. (Ex. 1001, 2:60-65.) The '576 patent discloses that it solves these problems

Case IPR2013-00139

Patent 7,269,576

by both permanently attaching usage rights to digital works, and by placing elements in repositories, which store and control the digital works and enforce the usage rights associated therewith. (Ex. 1001, 3:53-4:15.)

Figure 1 of the '576 patent illustrates the basic operations of the disclosed invention. (Ex. 1001, 4:31-34, 6:66-7:1). Figure 1 of the '736 patent is reproduced below:

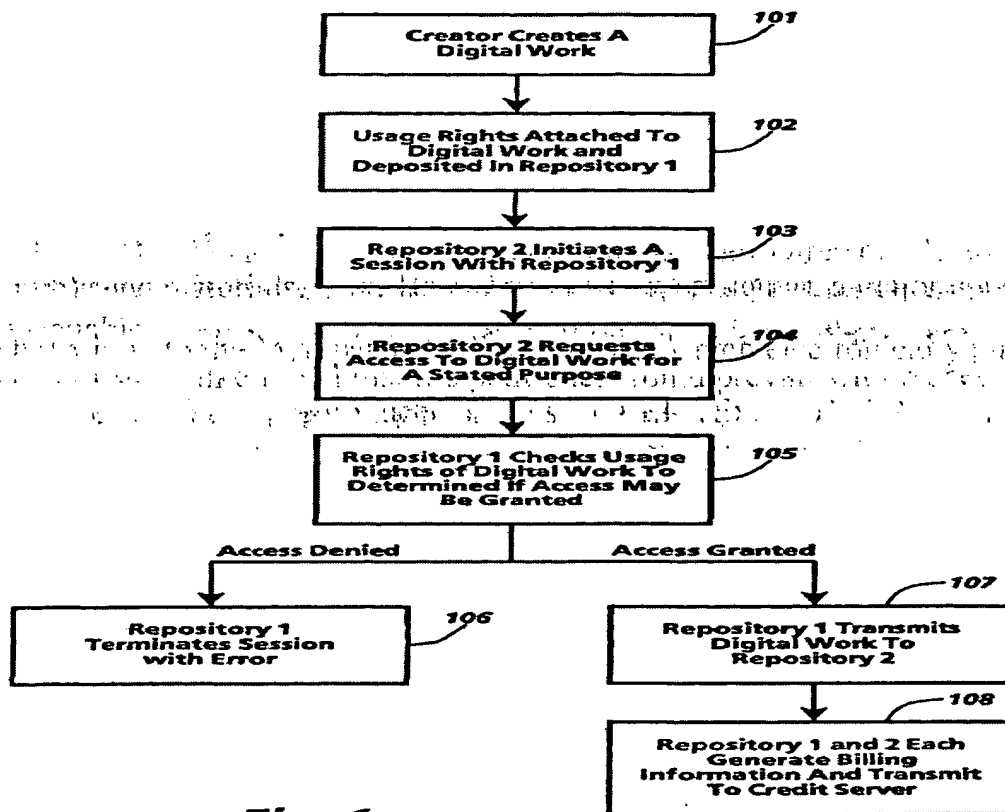


Fig. 1

Figure 1 illustrates the basic operations of repositories 1 and 2.

According to the embodiment of Figure 1, at step 101, a creator creates a digital work. (Ex. 1001, 7:1-2.) At step 102, the creator determines the

Case IPR2013-00139
Patent 7,269,576

appropriate usage rights and fees, attaches them to the digital work, and stores the digital work with the associated usage rights and fees in repository 1. (Ex. 1001, 7:2-7.) At step 103, repository 1 receives a request to access the digital work from repository 2. (Ex. 1001, 7:7-9.) Such a request, or session initiation, includes steps that help ensure that repository 1 and repository 2 are trustworthy. (Ex. 1001, 7:7-12.) At step 104, repository 2 requests access to the digital work stored in repository 1 for a stated purpose, *e.g.*, to print the digital work or obtain a copy of the digital work. (Ex. 1001, 7:13-17.) At step 105, repository 1 checks the usages rights associated with the digital work stored therein to determine if access to the digital work may be granted. (Ex. 1001, 7:17-24.) At step 106, if access is denied, repository 1 terminates the session with repository 2 by transmitting an error message. (Ex. 1001, 7:24-25.) At step 107, if access is granted, repository 1 transmits the digital work to repository 2. (Ex. 1001, 7:25-27.) At step 108, both repository 1 and 2 generate billing information prior to transmitting the billing information to a credit server. (Ex. 1001, 7:27-30.) The use of both repositories 1 and 2 for billing prevents attempts to circumvent the billing process. (Ex. 1001, 7:30-31.)

One embodiment described in the '576 patent relates to enforcing usage rights in rendering systems. (Ex. 1001, 8:16-67.) Rendering systems are systems that can render a digital work into its desired form, such as by printing a file on a printer or executing a software program in a processor. (Ex. 1001, 8:19-22, 8:37-38, 8:53-55.) Other examples of rendering systems include display, video, or audio systems. (Ex. 1001, 51:65-67.) Rendering systems include repositories that store digital works and maintain the security features of the '576 patent. (Ex.

Case IPR2013-00139
 Patent 7,269,576

1001, 8:22-23, 12:25-34.) Repositories in rendering systems can request to perform various usage transactions, such as play or print transactions, that obtain a digital work from a remote repository and then provide it to an attached rendering device to be rendered. (Ex. 1001, 30:23-35, 36:18-37:26.)

Figure 4a of the '576 patent is reproduced below:

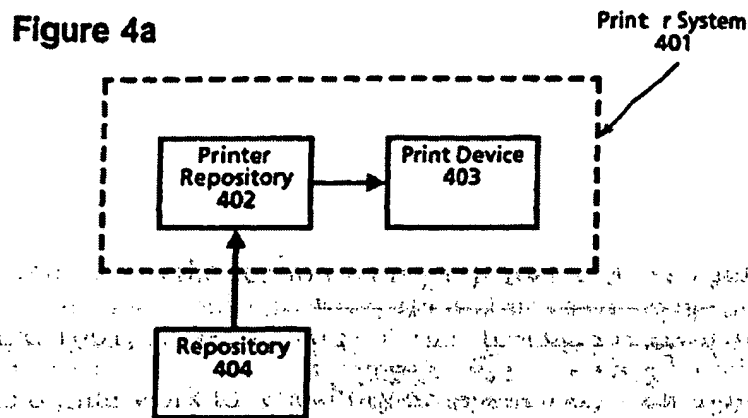


Figure 4a illustrates an example of a rendering system

According to the embodiment of Figure 4a, a printer system (401), including a print device (403) and a printer repository (402), is attached to an external repository (404) that contains digital works. (Ex. 1001, 8:26-29, 48-51.) The printer repository can obtain a copy of the digital work to be provided to the rendering device. (Ex. 1001, 8:36-38.) That is accomplished by invoking a specific type of usage transaction called a print transaction. (Ex. 1001, 36:55-37:26.) A print transaction begins with a requestor repository sending a message requesting permission to obtain and print a specified digital work that is stored in a server repository. (Ex. 1001, 36:55-37:26.) Certain rendering transactions require

Case IPR2013-00139
Patent 7,269,576

the presence of a digital ticket or an authorization object in a repository requesting a digital work before the digital work can be provided. (Ex. 1001, 36:45-46, 37:18-19, 31:6-9.) Repositories acquire digital tickets through authorization transactions that request authorization objects from a remote authorization repository. (Ex. 1001, 41:31-42:16.) If the repository requesting the digital work is in possession of an authorization object, the server repository determines whether the requestor is permitted to perform the transaction based on usage rights related to the digital work. (Ex. 1001, 36:45-46, 37:18-19, 30:59-31:49.) Once the transaction is determined as being permitted, the digital work is transmitted to the repository requesting the digital work, and then the digital work is rendered. (Ex. 1001, 36:47-50, 37:20-22.)

C. Exemplary Claims

Claims 1 and 18 are independent claims and are directed, respectively, to an apparatus and a method. Claims 2-17 directly or indirectly depend from claim 1, and claims 19-36 directly or indirectly depend from claim 18. Claims 1 and 18 are reproduced below, with a key term bolded for emphasis:

1. An apparatus for rendering digital content in accordance with rights that are enforced by the apparatus, said apparatus comprising:

a rendering engine configured to render digital content;

a storage for storing the digital content;

means for requesting use of the digital content stored in the storage; and

Case IPR2013-00139

Patent 7,269,576

a **repository** coupled to the rendering engine,

wherein the repository includes:

means for processing a request from the means for requesting,

means for checking whether the request is for a permitted rendering of the digital content in accordance with rights specified in the apparatus,

means for processing the request to make the digital content available to the rendering engine for rendering when the request is for a permitted rendering of the digital; and

means for authorizing the repository for making the digital content available for rendering, wherein the digital content can be made available for rendering only by an authorized repository, the repository comprising:

means for making a request [sic] for an authorization object required to be included within the repository for the apparatus to render the digital content; and

means for receiving the authorization object when it is determined that the request should be granted.

18. A method for controlling rendering of digital content on an apparatus having a rendering engine configured to render digital content and a storage for storing the digital content, said method comprising:

specifying rights within said apparatus for digital content stored in said storage, said rights specifying how digital content can be rendered;

storing digital content in said storage;

Case IPR2013-00139

Patent 7,269,576

receiving a request for rendering of said digital content stored in the storage;

checking whether said request is for a permitted rendering of said digital content in accordance with said rights specified within said apparatus;

processing the request to make said digital content available to the rendering engine for rendering when said request is for a permitted rendering of said digital content;

authorizing a repository for making the digital content available for rendering, wherein the digital content can be made available for rendering only by an authorized repository, the repository performing the steps of:

making a request for an authorization object required [sic] to be included within the repository for rendering of the digital content; and

receiving the authorization object when it is determined that the request should be granted.

D. Prior Art Relied Upon

ZTE relies upon the following prior art references:

Eur. Pat. Publ'n	0 268 139 ("EP '139")	May 25, 1988	(Ex. 1012)
Eur. Pat. Publ'n	0 464 306 ("EP '306")	Jan. 8, 1992	(Ex. 1010)
Hendricks	U.S. Patent 5,986,690	Nov. 16, 1999	(Ex. 1013)
Walker	U.S. Patent 4,868,736	Sept. 19, 1989	(Ex. 1011)
Wyman	U.S. Patent 5,260,999	Nov. 9, 1993	(Ex. 1014)

Case IPR2013-00139
Patent 7,269,576

E. The Alleged Grounds of Unpatentability

ZTE contends that the challenged claims are unpatentable based on the following grounds:

1. Claims 1-4, 8-11, 14-21, 25-28, and 31-36 are unpatentable under 35 U.S.C. § 102(b) as anticipated by EP '139;
2. Claims 1, 2, 4-9, 12-15, 17-19, 21-26, 29-32, and 34-36 are unpatentable under 35 U.S.C. § 102(b) as anticipated by Walker;
3. Claims 1-4, 7-15, 17-21, 24-32, and 34-36 are unpatentable under 35 U.S.C. § 102(e) as anticipated by Hendricks;
4. Claims 1, 2, 4-6, 8-12, 15, 16, 18, 19, 21-23, 25-29, 32, 33, 35, and 36 are unpatentable under 35 U.S.C. § 102(b) as anticipated by EP '306; and
5. Claims 5, 6, 22, and 23 are unpatentable under 35 U.S.C. § 103(a) as obvious over Hendricks in view of Wyman.

II. ANALYSIS

A. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are interpreted according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b). Also, claim terms are given their ordinary and customary meaning as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). An inventor may rebut that presumption by providing a definition of the term in the specification with

Case IPR2013-00139
Patent 7,269,576

reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

ContentGuard submits a proposed construction for the claim term “repository.” (Prel. Resp. 20-23.) We also note that in independent claim 1 there are numerous elements recited in means-plus-function format under 35 U.S.C. § 112, sixth paragraph, within the repository. We will construe each of these claim limitations in turn.

1. “*Repository*” (*Independent Claims 1 and 18*)

ContentGuard contends that the term “repository” should be interpreted as “a trusted system for supporting usage rights.” (Prel. Resp. 21.) ContentGuard cites several portions of the specification which support that construction. (Prel. Resp. 21-23, *citing* Ex. 1001, 4:6-7, 6:50-54, 12:25-34, 13:25-33, 13:51-56, 52:1-6.) ZTE does not provide an explicit construction for “repository.”

The specification provides a glossary which recites the following meaning for “repository”:

Conceptually a set of functional specifications defining core functionality in the support of usage rights. **A repository is a trusted system in that it maintains physical, communications and behavioral integrity.**

(Ex. 1001, 52:1-6, emphasis added.) By setting forth the term in a glossary and using the verb “is” following “repository” in the second sentence, the specification sets forth an explicit definition of “repository” as “a trusted system in that it maintains physical, communications and behavioral integrity.” The first sentence is also relevant to the definition of “repository” because it elaborates that the

Case IPR2013-00139
Patent 7,269,576

repository supports usage rights. Accordingly, we construe “repository” as “a trusted system which maintains physical, communications and behavioral integrity, and supports usage rights.”

Our analysis does not end here. In order to understand “a trusted system” it is necessary to construe “physical integrity,” “communications integrity,” and “behavioral integrity.” Those terms are described in a section of the specification labeled “[r]epositories.” For “physical integrity,” the specification describes:

Physical integrity refers to the integrity of the physical devices themselves. **Physical integrity applies both to the repositories and to the protected digital works.** Thus, the higher security classes of repositories themselves may have sensors that detect when tampering is attempted on their secure cases. **In addition to protection of the repository itself, the repository design protects access to the content of digital works.** In contrast with the design of conventional magnetic and optical devices-such as floppy disks, CD-ROMs, and videotapes-repositories **never allow non-trusted systems to access the works directly.** A maker of generic computer systems cannot guarantee that their platform will not be used to make unauthorized copies. The manufacturer provides generic capabilities for reading and writing information, and the general nature of the functionality of the general computing device depends on it. Thus, a copy program can copy arbitrary data. This copying issue is not limited to general purpose computers. It also arises for the unauthorized duplication of entertainment “software” such as video and audio recordings by magnetic recorders. Again, the functionality of the recorders depends on their ability to copy and they have no means to check whether a copy is authorized. In contrast, **repositories prevent access to the raw data by general devices and can test explicit rights and conditions before copying or otherwise granting access. Information is only accessed by protocol between trusted repositories.**

Case IPR2013-00139
Patent 7,269,576

(Ex. 1001, 12:35-61; emphasis added.) Much of the above description makes use of permissive terms such as “may” and “can” and, thus, do not reflect or indicate a required limitation for physical integrity. The specification also appears to use the terms or phrases in each of the following three groups interchangeably:

1. data, content, digital work, information;
2. non-trusted system, general device; and
3. “never allow access” and “prevent access.”

When referring to the relationship between the repository and data, the specification uses absolute terms such as “never” and “only.”

In light of the foregoing, we construe “physical integrity” as “preventing access to information by a non-trusted system.”

For “communications integrity,” the specification describes the following:

Communications integrity refers to the integrity of the communications channels between repositories. Roughly speaking, communications integrity means that repositories cannot be easily fooled by “telling them lies.” Integrity in this case refers to the property that **repositories will only communicate with other devices that are able to present proof that they are certified repositories**, and furthermore, that the repositories monitor the communications to detect “impostors” and malicious or accidental interference. Thus **the security measures involving encryption, exchange of digital certificates, and nonces described below are all security measures aimed at reliable communication** in a world known to contain active adversaries.

(Ex. 1001, 12:62-13:7; emphasis added.) We construe “communications integrity” as “only communicates with other devices that are able to present proof that they are trusted systems, for example, by using security measures such as encryption,

Case IPR2013-00139
Patent 7,269,576

exchange of digital certificates, and nonces.” The Encyclopedia of Cryptography defines “nonce” as “[a] number used in a cryptographic protocol to indicate the unique character of a message.” Newton, David E., Encyclopedia of Cryptography 197 (1997).

For “behavioral integrity,” the specification describes:

Behavioral integrity refers to the integrity in what repositories do. What repositories do is determined by the software that they execute. The integrity of the software is generally assured only by knowledge of its source. Restated, a user will trust software purchased at a reputable computer store but not trust software obtained off a random (insecure) server on a network. **Behavioral integrity is maintained by requiring that repository software be certified and be distributed with proof of such certification, i.e. a digital certificate.** The purpose of the certificate is to authenticate that the software has been tested by an authorized organization, which attests that the software does what it is supposed to do and that it does not compromise the behavioral integrity of a repository. **If the digital certificate cannot be found in the digital work or the master repository which generated the certificate is not known to the repository receiving the software, then the software cannot be installed.**

(Ex. 1001, 13:8-33; emphasis added.) We construe “behavioral integrity” in the context of a repository as “requiring software to include a digital certificate in order to be installed in the repository.”

The record is not without evidence in contrary to our interpretation. That is not unusual. The nature of interpretation is to come to the appropriate conclusion in light of all of the evidence. All of the evidence does not have to point uniformly in a single direction.

Case IPR2013-00139
Patent 7,269,576

The specification in Table 2 indicates ten different levels of security for repositories, and the lowest level, *i.e.*, level “0,” is described as follows:

Open system. Document transmission is unencrypted. No digital certificate is required for identification. The security of the system depends mostly on user honesty, since only modest knowledge may be needed to circumvent the security measures. The repository has no provisions for preventing unauthorized programs from running and accessing or copying files. The system does not prevent the use of removable storage and does not encrypt stored files.

(Ex. 1001, 15:30-41.) Thus, according to Table 2, repositories are not all trusted systems. Level “0” security means having an open system lacking in physical, communications, and behavioral integrity, and without support for managing usage rights. That is directly contrary to the meaning of “repository” as defined in the glossary. For reasons discussed below, we adhere to the definition provided in the glossary. The contrary evidence based on level “0” security shown in Table 2 is insufficient to outweigh the rest of the evidence including, in particular, the explicit definition provided in the glossary. We make our determination based on the totality of the evidence.

As noted above, the disclosed invention is about distribution of and usage rights enforcement of digital works. The problems described in the background portion of the specification concerns unauthorized and unaccounted distribution or usage of electronically published materials. (Ex. 1001, 1:24-43.) The ’576 patent states that it solves preexisting problems by both permanently attaching usage rights to digital works and placing elements in repositories which enforce those usage rights. (Ex. 1001, 3:53-4:15.)

Case IPR2013-00139
Patent 7,269,576

Here, the definition set forth in the glossary for “repository” is fully consistent with the description of the acknowledged prior art and the objective or goal to be achieved by the invention. The specification also contains detailed preferred embodiments utilizing repositories which are trusted systems to provide usage control for digital works. (Ex. 1001, 12:25-34, 26:20-44, 43:36-50:26.)

The bulk of the disclosure consistently is directed to repositories which are trusted systems for providing usage control for digital works. For example, the specification states:

The enforcement elements of the present invention are embodied in repositories. Among other things, repositories are used to store digital works, control access to digital works, bill for access to digital works and maintain the security and integrity of the system.

(Ex. 1001, 6:50-54, emphasis added.) Other references to “repository” in the specification that recite necessary features of repositories also support the definition in the glossary that a repository is a trusted system.

The core repository services 1302 comprise a set of functions **required by each and every repository.** The core repository services 1302 include the session initiation transactions which are defined in greater detail below. This set of services also includes a generic ticket agent which is used to “punch” a digital ticket and a generic authorization server for processing authorization specifications.

(Ex. 1001, 14:45-51, emphasis added.) In another example, the specification discloses that “[a]s a prerequisite to operation, a repository will require possession of an identification certificate” and that “identification certificates 1306 are required to enable the use of the repository.” (Ex. 1001, 13:42-44, 14:56-57.)

Case IPR2013-00139
Patent 7,269,576

Indeed, by using words such as “require” and “required,” such examples amply support the definition provided in the glossary that a repository is a trusted system.

In summary, the weight of the evidence supports the definition provided in the glossary, even applying the rule of broadest reasonable construction consistent with the specification. We regard as significant that the definition states in no equivocal manner that a repository “is a trusted system.”

2. Repository “means for ...” (Claim 1)

Independent claim 1 recites a repository including six different means-plus-function claim elements. The meaning of a means-plus-function limitation is governed by 35 U.S.C. § 112, sixth paragraph, which provides:¹

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

The above-quoted requirement applies regardless of the context in which the meaning of a means-plus-function claim element arises, *i.e.*, whether in a proceeding before the Patent and Trademark Office, or in validity or infringement litigation before the courts. *In re Donaldson*, 16 F.3d 1189, 1193 (Fed. Cir. 1994)(en banc). More importantly, the established law regarding 35 U.S.C. § 112,

¹ Section 4(c) of the America Invents Act (“AIA”) re-designated 35 U.S.C. § 112, ¶ 6, as 35 U.S.C. § 112(f). Because the ’576 patent has a filing date prior to September 16, 2012, the effective date of AIA, we refer to the pre-AIA version of 35 U.S.C. § 112.

Case IPR2013-00139
Patent 7,269,576

sixth paragraph, as applied to computer-implemented means-plus-function elements, is articulated in *Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1340 (Fed. Cir. 2008):

For computer-implemented means-plus-function claims where the disclosed structure is a computer programmed to implement an algorithm, “the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm.” *WMS Gaming, Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999). Thus the patent must disclose, at least to the satisfaction of one of ordinary skill in the art, enough of an algorithm to provide the necessary structure under 35 U.S.C. § 112, ¶ 6. This court permits a patentee to express that algorithm in any understandable terms including as a mathematical formula, in prose, *see In re Freeman*, 573 F.2d 1237, 1245-46 (CCPA 1978), or as a flow chart, or in any other manner that provides sufficient structure.

The above-quoted law of 35 U.S.C. § 112, sixth paragraph, is well established. In *Aristocrat Techs. Austl. Pty Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008), the Court of Appeals for the Federal Circuit stated:

In cases involving a computer-implemented invention in which the inventor has invoked means-plus-function claiming, this court has consistently required that the structure disclosed in the specification be more than simply a general purpose computer or microprocessor. The point of the requirement that the patentee disclose particular structure in the specification and that the scope of the patent claims be limited to that structure and its equivalents is to avoid pure functional claiming.

(Emphasis added.)

Case IPR2013-00139
Patent 7,269,576

More recently, the Federal Circuit also indicated that generally disclosing software without providing detail is not enough disclosure of structure. *Function Media, L.L.C. v. Google Inc.*, 708 F.3d 1310, 1318 (Fed. Cir. 2013). In that regard, the Federal Circuit stated that when dealing with a special purpose computer-implemented means-plus-function limitation, the specification must disclose the algorithm for performing the function and that the specification can express the algorithm in any understandable terms, such as mathematical formula, prose, or flow chart. *Id.*

Claim 1 is directed towards a system including a repository comprising, within it, six means-plus-function claim elements. Each of these claim elements is recited in the form of a means for performing a function without recital of any structure. As such, they are presumed to have invoked 35 U.S.C. § 112, sixth paragraph. *Personalized Media Communications LLC v. Int'l Trade Comm'n*, 161 F.3d 696, 703-04 (Fed. Cir. 1998); *Sage Prods. v. Devon Indus., Inc.*, 126 F.3d 1420, 1427-28 (Fed. Cir. 1997).

For each of the six means-plus-function elements, ZTE points to processing means 1200 as the corresponding structure disclosed in the specification, with the sixth means also including external interface 1206. (Pet. 9.) Processing means 1200 as disclosed in the specification of the '576 patent is comprised of processor element 1201, which may be a microprocessor or other suitable computing component, and processor memory 1202 which contains software used by the processor. (Ex. 1001, 13:59 to 14:10.) As presented by ZTE, the corresponding computing structure for each of the computer-implemented means is no more than

Case IPR2013-00139
Patent 7,269,576

a general purpose computer with generally referenced software. That, however, is incorrect.

A general purpose computer executing generally referenced software is insufficient to constitute corresponding structure of a claim element expressed in means-plus-function form under 35 U.S.C. § 112, sixth paragraph. *Finisar*, 523 F.3d at 1340; *Aristocrat*, 521 F.3d at 1333; *see also Function Media*, 708 F.3d at 1318. Instead, the structure of a computer-implemented means must be a “special purpose computer programmed to perform [a] disclosed algorithm.” *Finisar*, 523 F.3d at 1340. In that regard, the specification must disclose the computer executed algorithm for performing the recited function, and the specification can express the algorithm in any understandable terms, such as mathematical formula, prose, or flow chart. *Function Media*, 708 F.3d at 1318.

Hereinbelow, we consider each of the six means-plus-function claim elements and find algorithms sufficiently expressed in prose, which, in combination with the disclosed processor, form their corresponding structures.

a. means for processing a request from the means for requesting;

Claim 1 recites that the repository includes “means for processing a request from the means for requesting.” In the context of claim 1, the request to be processed is a request to use digital content from storage because claim 1 leads with (1) rendering engine configured to render digital content; (2) storage for storing digital content; and (3) means for requesting use of the digital content stored in storage.

Case IPR2013-00139
Patent 7,269,576

The specification discloses that “rendering” a digital work turns it into a desired form, and that rendering systems include printing, display, video, audio, or general purpose computer systems. (Ex. 1001, 8:19-22, 8:37-38, 8:53-55, 51:65-67.) Thus, rendering a digital work constitutes using the digital content of that work.

The '576 patent states that “[t]he usage transactions handler 1303 comprise[s] functionality for processing access requests to digital works.” (Ex. 1001, 14:58-59.) The specific actions taken for a given usage transaction depend on the specifications assigned for a given usage right. (Ex. 1001, 26:20-24, 34:25-26.) For rendering operations such as executing or displaying, the '576 patent discloses a “play” transaction which renders a digital work by displaying or executing it. (Ex. 1001, 36:18-54.) For rendering operations such as printing, the '576 patent discloses a “print” transaction which renders a digital work by printing it. (Ex. 1001, 36:55-37:26.) In both cases, a requester repository attached to a rendering device requests to render an object held by a server repository. (See Ex. 1001, 30:25-30.) Both of those transactions involve similar steps, but with a difference in the form of how a digital work is rendered.

Processing begins when a requester repository has sent a message to initiate a request. (Ex. 1001, 36:35-40, 37:9-13.) First, the server repository checks the compatibility of the requester repository and the validity of the requester's identification. (Ex. 1001, 36:41-44, 37:14-17.) Second, the requester and server repositories perform the common opening transaction steps of determining whether authorization is needed, and whether the requested transaction is permitted given the usage rights. (Ex. 1001, 36:45-46, 37:18-19, 30:59-31:49.) Third, requester

Case IPR2013-00139
Patent 7,269,576

and server repositories perform a transmission protocol to read and write blocks of data, and then the requester repository renders the digital work. (Ex. 1001, 36:47-50, 37:20-22.) Fourth, the contents are removed from the rendering device and the requester repository. (Ex. 1001, 36:51-52, 37:23-24.) Finally, the requester and server repositories perform the common closing transaction steps of updating the usage rights and billing information. (Ex. 1001, 36:53-54, 37:25-26, 32:20-31.)

The above-noted description constitutes a sufficiently disclosed algorithm, expressed in prose, which, in combination with processor 1200, constitutes a corresponding structure for the claimed “means for processing a request from the means for requesting.”

b. means for checking whether the request is for a permitted rendering of the digital content in accordance with rights specified in the apparatus;

Claim 1 recites that the repository includes “means for checking whether the request is for a permitted rendering of the digital content in accordance with rights specified in the apparatus.” The ’576 patent states that the print and play transactions both use the common opening transaction steps to determine whether the requested transaction is permitted. (Ex. 1001, 36:45-46, 37:18-19, 30:59-31:49.)

First, the requester repository determines whether an authorization certificate or a digital ticket is needed. (Ex. 1001, 31:3-9.) Second, the server repository generates a transaction identifier. (Ex. 1001, 31:10-13.) Third, the server repository determines whether the right is granted and whether time, security, and access based conditions are satisfied. (Ex. 1001, 31:13-33.) Finally, the server

Case IPR2013-00139
Patent 7,269,576

repository determines whether there are sufficient copies of the work to distribute. (Ex. 1001, 31:34-49.) The above-noted description constitutes a sufficiently disclosed algorithm, expressed in prose, which, in combination with processor 1200, constitutes a corresponding structure for the claimed “means for checking whether the request is for a permitted rendering of the digital content in accordance with rights specified in the apparatus.”

c. means for processing the request to make the digital content available to the rendering engine for rendering when the request is for a permitted rendering of the digital [content];

Claim 1 recites that the repository includes “means for processing the request to make the digital content available to the rendering engine for rendering when the request is for a permitted rendering of the digital [content].” The 576 patent states that the print and play transactions, when permitted, each transfer data from the server repository to the requester repository and the rendering device, and that the transfer is accomplished through the use of a transfer protocol. (Ex. 1001, 36:46-49, 37:20-22.)

First, transaction information is provided to the server repository by the requester repository. (Ex. 1001, 33:3-8.) Second, the server repository transmits a block of data to the requester repository and waits for an acknowledgement provided by the requester when the block of data has been received. (Ex. 1001, 33:9-15.) Unless a communications failure terminates the transaction, that process repeats until there are no more blocks to transmit. (Ex. 1001, 33:16-38, 33:46-49.) Finally, the requester repository commits the transaction and sends an acknowledgement to the server repository. (Ex. 1001, 33:39-45.) The above-noted

Case IPR2013-00139
Patent 7,269,576

description constitutes a sufficiently disclosed algorithm, expressed in prose, which, in combination with processor 1200, constitutes a corresponding structure for the claimed “means for processing the request to make the digital content available to the rendering engine for rendering when the request is for a permitted rendering of the digital [content].”

d. means for authorizing the repository for making the digital content available for rendering,

Claim 1 recites that the repository includes “means for authorizing the repository for making the digital content available for rendering.”

According a disclosed embodiment in the specification, certain rendering

transactions require the presence of a digital ticket in a server repository

before a digital work can be provided to a requester repository. (Ex. 1001,

36:45-46, 37:18-19, 31:6-9.) In that regard, digital tickets are acquired by a

repository through authorization transactions that request authorization

objects (digital tickets) from a remote authorization repository. (Ex. 1001,

41:31-42:16.)

First, a communication channel is set up between the server and the remote

repository. (Ex. 1001, 41:52-54.) Second, the server repository performs a

registration process with the remote repository. (Ex. 1001, 41:55-57.) Third, the

server repository invokes a “play” transaction to acquire the authorization object.

(Ex. 1001, 41:58-64.) Finally, the server repository performs tests on the

authorization object or executes a script before signaling that authorization has

been granted for rendering content. (Ex. 1001, 41:65-42:16.) The above-noted

description constitutes a sufficiently disclosed algorithm, expressed in prose,

Case IPR2013-00139
Patent 7,269,576

which, in combination with processor 1200, constitutes a corresponding structure for the claimed “means for authorizing the repository for making the digital content available for rendering.”

e. means for making a [request] for an authorization object required to be included within the repository for the apparatus to render the digital content;

Claim 1 recites that the repository includes “means for making a [request] for an authorization object required to be included within the repository for the apparatus to render the digital content.” As noted above, according to a disclosed embodiment in the specification, certain rendering transactions require the presence of a digital ticket in a server repository before a digital work can be provided to a requester repository. (Ex. 1001, 31:6-9; 41:31-42:16.) In that regard, digital tickets are acquired by a repository through authorization transactions that request authorization objects (digital tickets) from a remote repository. (*Id.*) First, a communications channel is set up between the server repository and the remote repository. (Ex. 1001, 41:52-54.) Second, the server repository performs a registration process with the remote repository. (Ex. 1001, 41:55-57.) Third, the server repository invokes a “play” transaction to request the authorization object. (Ex. 1001, 41:58-64.) The above-noted description constitutes a sufficiently disclosed algorithm, expressed in prose, which, in combination with processor 1200, constitutes a corresponding structure for the claimed “means for making a [request] for an authorization object required to be included within the repository for the apparatus to render the digital content.”

Case IPR2013-00139
Patent 7,269,576

f. means for receiving the authorization object when it is determined that the request should be granted.

Claim 1 recites that the repository includes “means for receiving the authorization object when it is determined that the request should be granted.” It is described in the specification that the authorization process invokes a “play” transaction to acquire an authorization object from a remote repository. (Ex. 1001, 41:50-65.) Sending and receiving of objects through a “play” transaction follow a particular transmission protocol. (Ex. 1001, 32:33; 36:47-50.)

According to that protocol, the server repository transmits a block of data to the requester repository and waits for an acknowledgement, which the requester provides when the block of data has been completely received. (Ex. 1001, 33:9-15.) Unless a communications failure terminates the transaction, that process repeats until there are no more blocks to transmit. (Ex. 1001, 33:16-38, 33:46-49.) Finally, the requester repository sends a completion acknowledgement to the server repository. (Ex. 1001, 33:39-45.) In that regard, the specification states (Ex. 1001, 33:45-48): “The key property is that both the server and the requester cancel a transaction if it is interrupted before all of the data blocks are delivered, and commits to it if all of the data blocks have been delivered.” The above-noted description constitutes a sufficiently disclosed algorithm, expressed in prose, which, in combination with processor 1200, constitutes a corresponding structure for the claimed “means for receiving the authorization object when it is determined that the request should be granted.”

Case IPR2013-00139
Patent 7,269,576

B. EP '139

ZTE contends that claims 1-4, 8-11, 14-21, 25-28, and 31-36 are unpatentable under 35 U.S.C. § 102(b) as anticipated by EP '139. (Pet. 15-27.) ZTE relies on claim charts describing how EP '139 allegedly describes the claimed subject matter, and also on the Declaration of Dr. Vijay K. Madiseti. (Ex. 1015.) We have considered ZTE's analysis and supporting evidence as well as ContentGuard's arguments, and are persuaded that ZTE has demonstrated a reasonable likelihood that it would prevail with respect to claims 18-21, 25-28, and 31-36, but not with respect to claims 1-4, 8-11, and 14-17.

Because ZTE's analysis of what is covered by the six means-plus-function elements recited in independent claim 1 within the "repository" is incorrect, ZTE has not properly applied those elements onto the disclosure of EP '139. Accordingly, for that reason alone, ZTE has not demonstrated a reasonable likelihood that it would prevail with respect to claims 1-4, 8-11, and 14-17.

EP '139 discloses a data processing system with a software copy protection mechanism. (Ex. 1012, 1:4-6.) To provide security, each computer or host that runs a protected software application is associated with a logically and physically secure coprocessor. (Ex. 1012, 1:25-29.) Figure 1 of EP '139 describes the important components of the software asset protection mechanism and how they interact. (Ex. 1012, 21:29-31). Figure 1 is reproduced below:

Case IPR2013-00139

Patent 7,269,576

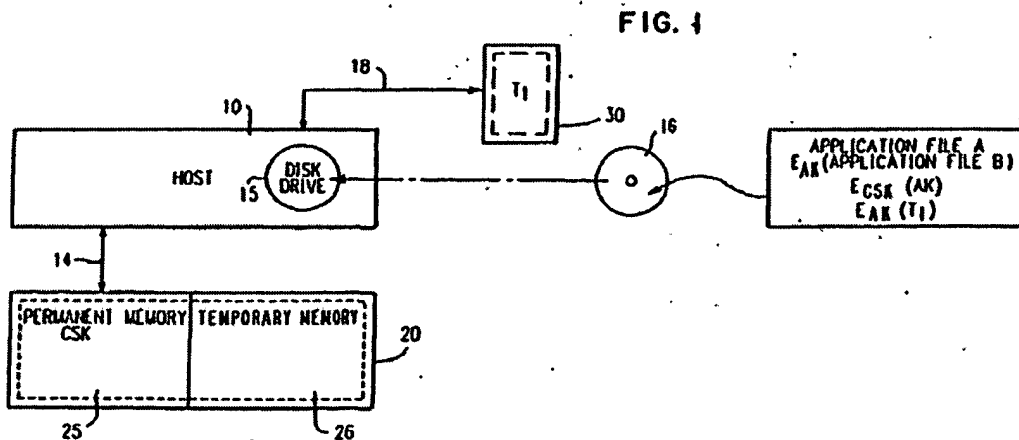


Figure 1 illustrates a composite computing system.

According to the embodiment of Figure 1, EP '139 discloses a software asset protection mechanism embodied in a composite computing system. (Ex. 1012, 21:58-22:5.) This composite computer system includes host 10 and coprocessor 20 connected via communication link 14. (Ex. 1012, 22:3-6.) Coprocessor 20 also includes permanent, non-volatile memory 25 and temporary memory 26. (Ex. 1012, 22:19-21.) In order for a user to execute a protection application, they must install a right to execute the application in the form of a software decryption key in permanent memory 25. (Ex. 1012, 22:22-32.) To install this right to execute, the user receives from a software vendor hardware cartridge 30 and distribution disk 16. (Ex. 1012, 22:32-36.) In one embodiment, distribution disk 16 stores three files: (1) the software decryption key, encrypted by a different decryption key provided by the vendor and also stored in coprocessor 20; (2) a protected application file encrypted with the application decryption key; and (3) and encrypted token data. (Ex. 1012, 22:23-27, 36-48.) To install the right to execute,

Case IPR2013-00139
Patent 7,269,576

coprocessor 20 decrypts the software decryption key in temporary memory, and then verifies that the hardware cartridge is authentic by querying the token data included in the cartridge. (Ex. 1012, 23:1-8.) Once a token has been used, it cannot be used again. (Ex. 1012, 23:8-11.) After verifying that the hardware cartridge is authentic and unused, coprocessor 20 will accept the right to execute and store the software decryption key in permanent memory 25. (Ex. 1012, 23:11-16.) With access to the software decryption key, the protected application file can be decrypted and stored in temporary memory 26 so that it may be executed by coprocessor 20. (Ex. 1012, 23:16-21.)

In one embodiment, EP '139 discloses a source composite processor, including source host 10 and coprocessor 20, that can communicate with a sink composite processor, including sink host 110 and sink coprocessor 120. (Ex. 1012, 25:49-52.) The source and sink processors are interconnected via communication link 200. (Ex. 1012, 26:5-6.) EP '139 discloses that source coprocessor 20 and sink coprocessor 120 exchange encrypted information. (Ex. 1012, 26:10-20.) Only coprocessors that are “member[s] of the family” are capable of decrypting and recognizing the information transmitted thereto. (Ex. 1012, 26:7-10, 20-23.) EP '139 also discloses that the source coprocessor 20 can encrypt a right to execute a particular software program and send it to the sink coprocessor 120. (Ex. 1012, 26:32-35.)

First, ContentGuard argues that EP '139 does not disclose a “repository.” (Prel. Resp. 32-33). We disagree. ZTE relies on coprocessor 20 in combination with permanent memory 25 and temporary memory 26 as constituting that repository. (Pet. 20, 25.) As noted above, “repository” is construed as “a trusted

Case IPR2013-00139
Patent 7,269,576

system which maintains physical, communications and behavioral integrity, and supports usage rights.” “Physical integrity” is construed as “preventing access to information by a non-trusted system.” “Communications integrity” is construed as “only communicates with other devices that are able to present proof that they are trusted systems, for example, by using security measures such as encryption, exchange of digital certificates, and nonces.” “Behavioral integrity” is construed as “requiring software to include a digital certificate in order to be installed in the repository.”

EP '139 does disclose a repository. EP '139 discloses that coprocessor 20 maintains physical integrity by being “provided with physical security which is effective to prevent mechanical tampering or access to the interior of the coprocessor 20 by a user or a pirate.” (Ex. 1012, 22:14-17.) EP '139 also discloses that coprocessor 20 possesses communications integrity. In order to communicate, proof is required that sink coprocessor 120 is a “member of the family” by exchanging encrypted information via communication link 200. (Ex. 1012, 26:5-6, 26:7-23.) EP '139 also discloses that coprocessor 20 possesses behavioral integrity by requiring source coprocessor 20 to transmit an encrypted right-to-execute for a protected software application before a sink coprocessor 120 can properly execute the application. (Ex. 1012, 26:32-35.) Thus, coprocessor 20, in combination with permanent memory 25 and temporary memory 26, fulfill all the requirements of a repository.

Claim 18 includes the steps of “authorizing a repository for making the digital content available for rendering,” and “making a request for an authorization object [required] to be included within the repository for rendering of the digital

Case IPR2013-00139
Patent 7,269,576

content.” ContentGuard argues that EP ’139 does not disclose either one of those steps. (Prel. Resp. 33-35.) With regard to those steps, ZTE cites to EP ’139’s disclosure of a right-to-execute software decryption key being installed based on the presence of a hardware cartridge containing unused tokens. (Pet. 21-22, 25-26.) ContentGuard identifies two possible interpretations of ZTE’s position regarding what satisfies the claimed authorization object, and argues that neither the tokens nor the right-to-execute keys can fulfill the requirement of an authorization object. (Prel. Resp. 34-35.) We have reviewed the charts presented by ZTE with regard to the request for an authorization object, and conclude that ZTE reasonably relied on the software decryption key as satisfying the

authorization object.

EP ’139 discloses that executing a protected application on coprocessor 20 requires the possession of a right-to-execute represented by a software decryption key (AK). (Ex. 1012, 22:27-32.) That key must be installed in permanent memory 25 before the application can be executed. (Ex. 1012, 22:27-30.) Before accepting the key into permanent memory 25, coprocessor 20 must verify that a hardware cartridge 30 containing unused tokens is attached and authentic. (Ex. 1012, 23:3-8.) The authentication is performed by querying the contents of the cartridge. (Ex. 1012, 22: 46-48, 23:5-8, 20:52-56.) Once the cartridge is verified, then the software decryption key is stored in permanent memory 25. (Ex. 1012, 23:11-16.)

The above-described sequence of operations implements and satisfies both the step of “authorizing a repository for making the digital content available for rendering,” and “making a request for an authorization object [required] to be

Case IPR2013-00139
Patent 7,269,576

included within the repository for rendering of the digital content.” In this case, the software decryption key is the authorization object.

ContentGuard argues that the right-to-execute represented by the software decryption key cannot fulfill the claimed “authorization object” because ZTE also relies upon the software decryption key to fulfill the claimed “usage rights.” (Prel. Resp. 34-35.) That argument is misplaced for two separate reasons. First, ContentGuard has not explained why the claim precludes a single element from satisfying both features. Secondly, based on the chart presented by ZTE with respect to claim 18, the decryption key need not be relied on as specifying how digital content can be rendered. (Pet. 24.) EP ’139 states that the right-to-execute

can be conditioned, and describes dates, times, and number of executions as conditions on how digital content can be rendered. (Ex. 1012, 23:30-40.)

For the foregoing reasons, we conclude that ZTE has demonstrated a reasonable likelihood that it would prevail with respect to claims 18.

Claims 19-21, 25-28, and 31-36 each depend directly or indirectly from claim 18. We have considered the rationales presented by ZTE with respect to those claims and are persuaded thereby. ContentGuard has not submitted arguments specifically directed to ZTE’s positions with regard to those dependent claims.

C. Walker

ZTE contends that claims 1, 2, 4-9, 12-15, 17-19, 21-26, 29-32, and 34-36 are unpatentable under 35 U.S.C. § 102(b) as anticipated by Walker. (Pet. 28-38.) ZTE relies on claim charts describing how Walker allegedly describes the claimed

Case IPR2013-00139
Patent 7,269,576

subject matter, and also on the Declaration of Dr. Vijay K. Madiseti. (Ex. 1015.)

We have considered ZTE's analysis and supporting evidence as well as ContentGuard's arguments, and are not persuaded that ZTE has demonstrated a reasonable likelihood of success with respect to claims 1, 2, 4-9, 12-15, 17-19, 21-26, 29-32, and 34-36.

Because ZTE's analysis of what is covered by the six means-plus-function elements recited in independent claim 1 within the "repository" is incorrect, ZTE has not properly applied those elements onto Walker's disclosure. Accordingly, for that reason alone, ZTE has not demonstrated a reasonable likelihood that it would prevail with respect to claims 1, 2, 4-9, 12-15, and 17.

With regard to all claims 1, 2, 4-9, 12-15, 17-19, 21-26, 29-32, and 34-36, we are not persuaded that Walker discloses a "repository." As noted above, we construe a "repository" as "a trusted system which maintains physical, communications and behavioral integrity, and supports usage rights." "Communications integrity" is construed as "only communicates with other devices that are able to present proof that they are trusted systems, for example, by using security measures such as encryption, exchange of digital certificates, and nonces."

Walker discloses a system for controlling access to a store of information in divisible form using a unique code and, specifically, discloses controlling the length of time a computer program is used. (Ex. 1011, 1:7-11.) In one embodiment, a control system includes operating device 10, interface 16, and key storage unit 18, each of which is connected to control device 12. (Ex. 1011, 4:13-21.) Storage unit 18, operational device 10, control device 12, and interface 16 can

Case IPR2013-00139
Patent 7,269,576

be interlinked by electrical, optical, radio frequency, or other signal carrying means. (Ex. 1011, 5:17-20.) At the beginning of operation, control device 12 requests a data unit provided by a user and compares it to one stored in an area of key storage unit 18. (Ex. 1011, 4:46-49.) If a match is found, control device 12 allows operation of operating device 10 until a remaining amount of time becomes zero. (Ex. 1011, 4: 16-19, 4:51-57.)

To satisfy the claimed “repository”, ZTE relies on Walker’s control device 12 in combination with key storage unit 18. (Pet. 31-32, 36.) Walker discloses that the elements that control device 12 and key storage unit 18 communicate with are clock 14, operating device 10, and interface to control device 16. (Ex. 1011, 4:13-22.) There is no disclosure that any of these communication connections maintain any sort of security measures. Walker discloses that if key storage unit 18 is removed, then further operation of operational device 10 is prevented. (Ex. 1011, 5:10-16.) That, however, does not satisfy the requirements of communications integrity. Walker does not disclose that control device 12 and key storage unit 18 as a combined system operates with “security measures such as encryption, exchange of digital certificates, and nonces,” so that it “only communicates with other devices that are able to present proof that they are trusted systems,” which is required for “communications integrity.”

Because Walker as discussed by ZTE does not meet the requirements of the claimed “repository,” ZTE has not shown a reasonable likelihood that it would prevail in showing that independent claims 1 and 18 of the ’576 patent are anticipated under 35 U.S.C. § 102(b) by Walker. Claims 2, 4-9, 12-15, 17, 19, 21-26, 29-32, and 34-36 each depend directly or indirectly on claim 1 or claim 18.

Case IPR2013-00139
Patent 7,269,576

For the same reason discussed above in connection with claims 1 and 18, ZTE has not shown a reasonable likelihood that claims 2, 4-9, 12-15, 17, 19, 21-26, 29-32, and 34-36 are unpatentable under 35 U.S.C. § 102(b) as anticipated by Walker.

D. Hendricks

ZTE contends that claims 1-4, 7-15, 17-21, 24-32, and 34-36 are unpatentable under 35 U.S.C. § 102(e) as anticipated by Hendricks. (Pet. 38-49.) ZTE relies on claim charts describing how Hendricks allegedly describes the claimed subject matter, and also on the Declaration of Dr. Vijay K. Madiseti. (Ex. 1015.) We have considered ZTE's analysis and supporting evidence as well as ContentGuard's arguments, and are not persuaded that ZTE has demonstrated a reasonable likelihood of success with respect to claims 1-4, 7-15, 17-21, 24-32, and 34-36.

Because ZTE's analysis of what is covered by the six means-plus-function elements recited in independent claim 1 within the "repository" is incorrect, ZTE has not properly applied those elements onto Hendricks' disclosure. Accordingly, for that reason alone, ZTE has not demonstrated a reasonable likelihood that it would prevail with respect to claims 1-4, 7-15, and 17.

With regard to all claims 1-4, 7-15, 17-21, 24-32, and 34-36, we are not persuaded that Hendricks discloses a "repository." As noted above, we construe a "repository" as "a trusted system which maintains physical, communications and behavioral integrity, and supports usage rights." "Communications integrity" is construed as "only communicates with other devices that are able to present proof

Case IPR2013-00139
Patent 7,269,576

that they are trusted systems, for example, by using security measures such as encryption, exchange of digital certificates, and nonces.”

Hendricks discloses an electronic book selection and delivery system. (Ex. 1013, 1:27). In particular, Hendricks discloses a viewer 266 that allows books to be stored, read, and erased, and includes the capability to order books and retain them in memory for a predetermined period of time. (Ex. 1013, 12:1-6.) The viewer 266 requests information from library 262. (Ex. 1013, 10:18-19.) Information requests from viewer 266 are received either through a cable connecting viewer 266 to library 262, or through wireless transmissions such as radio frequency. (Ex. 1013, 10:18-22.) When viewer 266 requests a specific book from library 262, library 262 opens an electronic file for the specific book requested by viewer 266 and transmits the information on a packet-by-packet basis. (Ex. 1013, 10:37-41.)

To satisfy the claimed “repository”, ZTE relies on the non-display related internal components of Hendricks’ viewer, such as microprocessor 621, instruction memory 732, and digital logic coupled to the video graphics controller. (Pet. 42, citing Ex. 1013, 11:8-9.) Hendricks does disclose encrypting certain communications to the viewer, but that does not mean the viewer only communicates with trusted systems. (Ex. 1013, 11:8-16, 12:9-12.) Hendricks also performs ID matching, where incoming data includes an ID that is compared to the ID of the viewer; only if these IDs match is the data stored to the viewer. (Ex. 1013, 11:8-13.) The ID matching protects the integrity of textual data and locks a given work to a single viewer, but does not ensure that the viewer only communicates with trusted systems. (Ex. 1013, 9:5-8.) Hendricks does not

Case IPR2013-00139
Patent 7,269,576

disclose that viewer 266 “only communicates with other devices that are able to present proof that they are trusted systems.” Therefore Hendricks does not disclose a “repository.” As presented by ZTE, Hendricks’ system lacks “communications integrity.”

Because Hendricks as discussed by ZTE does not meet the requirements of the claimed “repository,” ZTE has not shown a reasonable likelihood that it would prevail in showing that independent claims 1 and 18 of the ’576 patent are anticipated under 35 U.S.C. § 102(e) by Hendricks. Claims 2-4, 7-15, 17-21, 24-32, and 34-36 each depend directly or indirectly on claim 1 or claim 18. For the same reasons discussed above in connection with claims 1 and 18, ZTE has not shown a reasonable likelihood that claims 2-4, 7-15, 17-21, 24-32, and 34-36 are unpatentable under 35 U.S.C. § 102(e) as anticipated by Hendricks.

E. EP ’306

ZTE contends that claims 1, 2, 4-6, 8-12, 15, 16, 18, 19, 21-23, 25-29, 32, 33, 35, and 36 are unpatentable under 35 U.S.C. § 102(b) as anticipated by EP ’306. (Pet. 49-59.) ZTE relies on claim charts describing how EP ’306 allegedly describes the claimed subject matter, and also on the Declaration of Dr. Vijay K. Madisetti. (Ex. 1015.) We have considered ZTE’s analysis and supporting evidence as well as ContentGuard’s arguments, and are not persuaded that ZTE has demonstrated a reasonable likelihood that it would prevail with respect to claims 1, 2, 4-6, 8-12, 15, 16, 18, 19, 21-23, 25-29, 32, 33, 35, and 36.

Because ZTE’s analysis of what is covered by the six means-plus-function elements recited in independent claim 1 within the “repository” is incorrect, ZTE

Case IPR2013-00139
Patent 7,269,576

has not properly applied those elements onto the disclosure of EP '306.

Accordingly, for that reason alone, ZTE has not demonstrated a reasonable likelihood that it would prevail with respect to claims 1, 2, 4-6, 8-12, 15, and 16.

With regard to all claims 1, 2, 4-6, 8-12, 15, 16, 18, 19, 21-23, 25-29, 32, 33, 35, and 36, we are not persuaded that EP '306 discloses a “repository.” As noted above, we construe a “repository” as “a trusted system which maintains physical, communications and behavioral integrity, and supports usage rights.”

“Communications integrity” is construed as “only communicates with other devices that are able to present proof that they are trusted systems, for example, by using security measures such as encryption, exchange of digital certificates, and

nonces.”

EP '306 discloses managing display and printing operations for a document by a data processor to comply with proprietary and security restrictions of the document. (Ex. 1010, 1:5-10.) In particular, EP '306 discloses that online books may be rendered on a variety of display devices. (Ex. 1010, 2:2-4.) The electronic books may be communicated, stored, displayed, and modified. (Ex. 1010, 2:12-14.) EP '306 provides a book data stream in an intermediate format for storing on-line information that is specifically designed to be used by a book display program on the display device. (Ex. 1010, 1:54-57.) The book display program may be a document manager system including a processor 20 connected to a display 26, memory 22, printer 44, disk drive 46, communications adapter 48, and enunciator 52. (Ex. 1010, 6:48-52.)

ZTE regards EP '306's memory 22 in combination with processor 20 as constituting a repository. (Pet. 52, 56.) As disclosed in EP '306, however, the

Case IPR2013-00139
Patent 7,269,576

combination of memory 22 and processor 20, does not possess “communications integrity.” While EP ’306 discloses that processor 20 and memory 22 are capable of communicating with an outside device via communications adaptor 48, EP ’306 does not disclose using security measures between the outside device and a combination of processor 20 and memory 22 via communications adaptor 48, as is required for “communications integrity.”

Because EP ’306 does not properly account for the claimed “repository,” ZTE has not shown a reasonable likelihood that it would prevail in showing that independent claims 1 and 18 are anticipated under 35 U.S.C. § 102(b) by EP ’306. Claims 2, 4-6, 8-12, 15, 16, 19, 21-23, 25-29, 32, 33, 35, and 36 each depend directly or indirectly on claim 1 or claim 18. For the reasons set forth above for claims 1 and 18, ZTE has not shown a reasonable likelihood that claims 2, 4-6, 8-12, 15, 16, 19, 21-23, 25-29, 32, 33, 35, and 36 are unpatentable under 35 U.S.C. § 102(b) as anticipated by EP ’306.

F. Hendricks in view of Wyman

ZTE contends that claims 5, 6, 22, and 23 are unpatentable under 35 U.S.C. § 103(a) as obvious over Hendricks in view of Wyman. (Pet. 59.) We have considered ZTE’s analysis and supporting evidence as well as ContentGuard’s arguments, and are not persuaded that ZTE has demonstrated a reasonable likelihood of success with respect to claims 5, 6, 22, and 23.

Claim 5 depends on claim 1 and claim 6 depends on claim 5. Claim 22 depends on claim 18 and claim 23 depends on claim 22. With respect to these claims, the above-noted deficiencies of Hendricks with respect to independent

Case IPR2013-00139
Patent 7,269,576

claims 1 and 18 are not cured by ZTE's reliance on and application of Wyman. Accordingly, ZTE has not shown a reasonable likelihood that it would prevail in showing that claims 5, 6, 22, and 23 are unpatentable under 35 U.S.C. § 103(a) as obvious over Hendricks in view of Wyman.

G. Declaration of Dr. Vijay K. Madisetti (Ex. 1015)

ContentGuard contends that Dr. Madisetti's declaration is entitled to little or no weight because it merely parrots the arguments made by ZTE in the petition. (Prel. Resp. 48-49.) The current situation does not require us to assess the strength of ContentGuard's argument. Even if we were to give Dr. Madisetti's declaration little or no weight, the content of EP '139 and the arguments of the parties nonetheless demonstrate a reasonable likelihood that ZTE will prevail on its assertion that claims 18-21, 25-28, and 31-36 of the '576 patent are unpatentable.

III. CONCLUSION

For the forgoing reasons, we determine that the information presented in the petition establishes that there is a reasonable likelihood that ZTE would prevail with respect to claims 18-21, 25-28, and 31-36 of the '576 patent.

Case IPR2013-00139
Patent 7,269,576

IV. ORDER

Accordingly, it is

ORDERED that pursuant to 35 U.S.C. § 314(a), an *inter partes* review is hereby instituted as to claims 18-21, 25-28, and 31-36 under 35 U.S.C. § 102(b) as anticipated by EP '139;

FURTHER ORDERED that an *inter partes* review is not instituted with respect to the following alleged grounds of unpatentability:

A. Claims 1-4, 8-11, and 14-17 as anticipated by EP '139 under 35 U.S.C. § 102(b);

B. Claims 1, 2, 4-9, 12-15, 17-19, 21-26, 29-32, and 34-36 as anticipated by Walker under 35 U.S.C. § 102(b);

C. Claims 1-4, 7-15, 17-21, 24-32, and 34-36 as anticipated by Hendricks under 35 U.S.C. § 102(e);

D. Claims 1, 2, 4-6, 8-12, 15, 16, 18, 19, 21-23, 25-29, 32, 33, 35, and 36 as anticipated by EP '306 under 35 U.S.C. § 102(b); and

E. Claims 5, 6, 22, and 23 as unpatentable over Hendricks and Wyman under 35 U.S.C. § 103(a);

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial. The trial will commence on the entry date of this decision;

FURTHER ORDERED that an initial conference call with the Board is scheduled for 3:30 PM, on July 29, 2013. The parties are directed to the Office Trial Practice Guide, 77 *Fed. Reg.* 48756, 48765-66 (Aug. 14, 2012) for guidance

Case IPR2013-00139
Patent 7,269,576

in preparing for the initial conference call, and should come prepared to discuss any proposed changes to the Scheduling Order entered herewith and any motions the parties anticipate filing during the trial.

Case IPR2013-00139
Patent 7,269,576

For PETITIONER:

Jon H. Beaupre
Miyoung Shin
Jeremy S. Snodgrass
Brinks, Hofer, Gilson & Lione
jbeaupre@brinkshofer.com
mshin@brinkshofer.com
jsnodgrass@brinkshofer.com

For PATENT OWNER

Robert Greene Sterne
Jon E. Wright
Sterne, Kessler, Goldstein & Fox PLLC
rsterne-PTAB@skgf.com
jwright-PTAB@skgf.com

Venice, Naples, Mantua, Florence, and other city-states, along with the political intrigue and plotting that developed as a consequence of this economic interchange. David Kahn reports that, by the end of the sixteenth century, cryptology had become important enough for most Italian city states to employ full-time cipher secretaries. These officials were responsible for developing new nomenclators, enciphering plaintexts, deciphering incoming messages, and breaking captured cryptograms.

A nomenclator is actually a hybrid of code and cipher systems. In its earliest form, it consisted of a relatively short list of names alluded to in secret documents, along with codewords representing the names. In one nomenclator, for example, "Naples" was represented by the word *nobile* (noble), while "Florence" was represented by the word *terra* (land).

Before long, a simple monosubstitution cipher alphabet was added to the list of names. The nomenclator mentioned above, for example, used the symbol g for the letter C and the symbol T for the letter O. Over time, both the codenames and cipher alphabets used in nomenclators became more extensive and complex. Rather than a few dozen codewords, they often contained a few thousand. In place of a monosubstitution alphabet, these nomenclators employed multiple substitutes, or homophones. Nomenclators also commonly included symbols for nulls, or *nihil importantes* (nothing important), to confuse prospective cryptanalysts.

An example of a message encrypted by means of a nomenclator (using modern symbols and language) might look like the following:

PLAINTEXT: S E N D M O N E Y T O S M I T H
nomenclator: x t v i k j o v e a b p c t u l i p

See also: cipher; code; homophones; monoalphabetic substitution; null.

For further reading: David Kahn, *The Codebreakers: The Story of Secret Writing*, New York: Macmillan, 1967, ch. 3.

Nonce

A number used in a cryptographic protocol to indicate the unique character of a message. Nonces are essential when the same protocol is used many times with the same set of participants. Theoretically, it would be simple for a third party to alter any particular transmission using the protocol if no change were made in its use each time. A number of different devices can be used as nonces, including large random numbers and time-stamps.

See also: random number; time-stamp.

For further reading: Charlie Kaufman, Radia Perlman, and Mike Speciner, *Network Security: Private Communication in a Public World*, Englewood Cliffs, NJ: Prentice-Hall, 1995, pp. 244, 254-256.

Nonrepudiation

Proof that a particular person or organization has made some type of agreement with one or more other people or organizations. Nonrepudiation means that a person or organization cannot say at some time in the future that he, she, or it never really agreed to some arrangement with another party.

Nonrepudiation is a normal and common feature of agreements in everyday life. For example, when someone wants to borrow money from a bank, he or she signs an agreement indicating that the money really was borrowed and that it will be paid back. The person cannot later say that the money was never really obtained and/or that there was never any intent to pay the money back.

Nonrepudiation is normal in business transactions also. Alice may sign an agreement with Bob to buy 10,000 shares of stock in the ABC Company for \$1 million. Her signature on the agreement is accepted as proof that she made the agreement in the first place.

For many everyday transactions, a personal signature is sufficient evidence for later nonrepudiation of an agreement. In many cases, the signature may need to be witnessed by a trusted third party.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☒ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:**

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.