



US006963859B2

(12) **United States Patent**  
**Stefik et al.**

(10) **Patent No.:** **US 6,963,859 B2**  
(45) **Date of Patent:** **Nov. 8, 2005**

(54) **CONTENT RENDERING REPOSITORY** 3,790,700 A 2/1974 Callais et al.  
 3,798,605 A 3/1974 Feistel  
 (75) Inventors: **Mark J. Stefik**, Portola Valley, CA 4,159,468 A 6/1979 Barnes et al.  
 (US); **Peter L. Pirolli**, San Francisco, 4,220,991 A 9/1980 Hamano et al.  
 CA (US)

(Continued)

(73) Assignee: **ContentGuard Holdings, Inc.**,  
Wilmington, DE (US)

**FOREIGN PATENT DOCUMENTS**

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 78 days.

EP 0 084 441 7/1983  
 EP 0 180 460 5/1986  
 EP 0 332 707 9/1989  
 EP 0 651 554 5/1995  
 EP 0 668 695 8/1995

(Continued)

(21) Appl. No.: **10/345,390**

(22) Filed: **Jan. 16, 2003**

**OTHER PUBLICATIONS**

(65) **Prior Publication Data**

US 2003/0225699 A1 Dec. 4, 2003

Weber, Robert. Digital Rights Management Technologies. Oct. 1995. Retrieved from IDS.\*  
 "National Semiconductor and EPR Partner for Information Metering/Data Security Cards" Mar. 4, 1994, Press Release from Electronic Publishing Resources, Inc.

**Related U.S. Application Data**

(Continued)

(63) Continuation of application No. 09/778,006, filed on Feb. 7, 2001, now Pat. No. 6,714,921, which is a division of application No. 08/967,084, filed on Nov. 10, 1997, now Pat. No. 6,236,971, which is a continuation of application No. 08/344,760, filed on Nov. 23, 1994, now abandoned.

*Primary Examiner*—James A Reagan

(74) *Attorney, Agent, or Firm*—Marc S. Kaufman; Nixon Peabody, LLP

(51) **Int. Cl.**<sup>7</sup> ..... **G06F 17/60**

(52) **U.S. Cl.** ..... **705/51; 705/52; 705/53; 705/54; 705/55; 705/56; 705/57; 705/58; 705/59; 705/50; 380/201; 707/9; 707/104.1; 713/182; 713/183; 713/184; 713/185; 713/186**

(58) **Field of Search** ..... **705/50-59; 380/201, 380/30; 707/9, 104.1; 713/182-186, 156; 235/449; 379/93**

(57) **ABSTRACT**

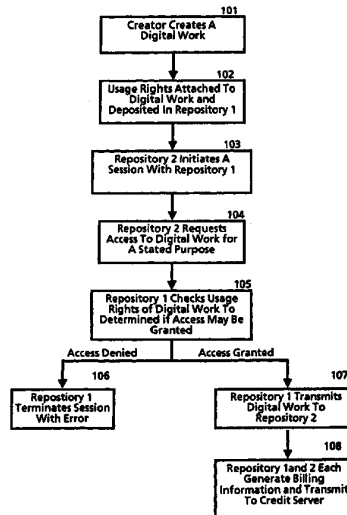
A rendering system adapted for use in a system for managing use of content and operative to rendering content in accordance with usage rights associated with the content. The system includes a rendering device configured to render the content and a repository coupled to the rendering device and operative to enforce usage rights associated with the content and permit the rendering device to render the content in accordance with a manner of use specified by the usage rights.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

3,263,158 A 7/1966 Barga et al.  
 3,609,697 A 9/1971 Blevins et al.

**84 Claims, 13 Drawing Sheets**



U.S. PATENT DOCUMENTS			FOREIGN PATENT DOCUMENTS		
4,278,837	A	7/1981 Best	5,455,953	A	10/1995 Russell
4,323,921	A	4/1982 Guillou	5,457,746	A	10/1995 Dolphin
4,442,486	A	4/1984 Mayer	5,473,687	A	12/1995 Lipscomb et al.
4,529,870	A	7/1985 Chaum	5,473,692	A	12/1995 Davis
4,558,176	A	12/1985 Arnold et al.	5,499,298	A	3/1996 Narasimhalu et al.
4,593,376	A	6/1986 Volk	5,502,766	A	3/1996 Boebert et al.
4,614,861	A	9/1986 Pavlov et al.	5,504,814	A	4/1996 Miyahara
4,644,493	A	2/1987 Chandra et al.	5,504,818	A	4/1996 Okano
4,658,093	A	4/1987 Hellman	5,504,837	A	4/1996 Griffeth et al.
4,713,753	A	12/1987 Beobert et al.	5,509,070	A	4/1996 Schull
4,796,220	A	1/1989 Wolfe	5,530,235	A	6/1996 Stefik et al.
4,817,140	A	3/1989 Chandra et al.	5,532,920	A	7/1996 Hartrick et al.
4,827,508	A	5/1989 Shear	5,534,975	A	7/1996 Stefik et al.
4,868,376	A	9/1989 Lessin et al.	5,539,735	A	7/1996 Moskowitz
4,891,838	A	1/1990 Faber	5,563,946	A	10/1996 Cooper et al.
4,924,378	A	5/1990 Hershey et al.	5,568,552	A	10/1996 Davis
4,932,054	A	6/1990 Chou et al.	5,621,797	A	4/1997 Rosen
4,937,863	A	6/1990 Robert et al.	5,629,980	A	5/1997 Stefik et al.
4,949,187	A	8/1990 Cohen	5,633,932	A	5/1997 Davis et al.
4,953,209	A	8/1990 Ryder, Sr. et al.	5,634,012	A	5/1997 Stefik et al.
4,961,142	A	10/1990 Elliott et al.	5,638,443	A	6/1997 Stefik et al.
4,975,647	A	12/1990 Downer et al.	5,649,013	A	7/1997 Stuckey et al.
4,977,594	A	12/1990 Shear	5,655,077	A	8/1997 Jones et al.
4,999,806	A	3/1991 Chernow et al.	5,708,717	A	1/1998 Alasia
5,010,571	A	4/1991 Katznelson	5,734,823	A	3/1998 Saigh et al.
5,014,234	A	5/1991 Edwards, Jr.	5,734,891	A	3/1998 Saigh
5,023,907	A	6/1991 Johnson et al.	5,737,413	A	4/1998 Akiyama et al.
5,047,928	A	9/1991 Wiedemer	5,737,416	A	4/1998 Cooper et al.
5,050,213	A	9/1991 Shear	5,745,569	A	4/1998 Moskowitz et al.
5,052,040	A	9/1991 Preston et al.	5,748,783	A	5/1998 Rhoads
5,058,164	A	10/1991 Elmer et al.	5,757,907	A	5/1998 Cooper et al.
5,103,476	A	4/1992 Waite et al.	5,761,686	A	6/1998 Bloomberg
5,113,519	A	5/1992 Johnson et al.	5,765,152	A	6/1998 Erickson
5,136,643	A	8/1992 Fischer	5,768,426	A	6/1998 Rhoads
5,138,712	A	* 8/1992 Corbin ..... 713/200	5,825,892	A	10/1998 Braudaway et al.
5,146,499	A	9/1992 Geffrotin	5,892,900	A	4/1999 Ginter et al.
5,148,481	A	9/1992 Abraham et al.	5,910,987	A	6/1999 Ginter et al.
5,159,182	A	10/1992 Eisele	5,915,019	A	6/1999 Ginter et al.
5,183,404	A	2/1993 Aldous et al.	5,917,912	A	6/1999 Ginter et al.
5,191,193	A	3/1993 Le Roux	5,920,861	A	7/1999 Hall et al.
5,204,897	A	4/1993 Wyman	5,940,504	A	8/1999 Griswold
5,222,134	A	6/1993 Waite et al.	5,943,422	A	8/1999 Van Wie et al.
5,235,642	A	8/1993 Wobber et al.	5,949,876	A	9/1999 Ginter et al.
5,247,575	A	9/1993 Sprague et al.	5,982,891	A	11/1999 Ginter et al.
5,255,106	A	10/1993 Castro	5,999,949	A	12/1999 Crandall
5,260,999	A	* 11/1993 Wyman ..... 705/59	6,047,067	A	4/2000 Rosen
5,263,157	A	11/1993 Janis	6,112,181	A	8/2000 Shear et al.
5,263,158	A	11/1993 Janis	6,115,471	A	9/2000 Oki et al.
5,276,444	A	1/1994 McNair	6,138,119	A	10/2000 Hall et al.
5,276,735	A	1/1994 Boebert et al.	6,157,721	A	12/2000 Shear et al.
5,291,596	A	3/1994 Mita	6,185,683	B1	2/2001 Ginter et al.
5,295,266	A	* 3/1994 Hinsley et al. .... 718/101	6,226,618	B1	5/2001 Downs et al.
5,301,231	A	4/1994 Abraham et al.	6,233,684	B1	5/2001 Stefik et al.
5,311,591	A	5/1994 Fischer	6,237,786	B1	5/2001 Ginter et al.
5,319,705	A	6/1994 Halter et al.	6,240,185	B1	5/2001 Van Wie et al.
5,335,346	A	* 8/1994 Fabbio ..... 711/163	6,253,193	B1	6/2001 Ginter et al.
5,337,357	A	8/1994 Chou et al.	6,266,618	B1	7/2001 Ye et al.
5,339,091	A	8/1994 Yamazaki et al.	6,292,569	B1	9/2001 Shear et al.
5,339,392	A	* 8/1994 Risberg et al. .... 345/762	6,301,660	B1	10/2001 Benson
5,341,429	A	8/1994 Stringer et al.	6,327,652	B1	12/2001 England et al.
5,347,579	A	9/1994 Blandford	6,330,670	B1	12/2001 England et al.
5,381,526	A	1/1995 Ellson	6,345,256	B1	2/2002 Milsted et al.
5,394,469	A	2/1995 Nagel et al.	6,363,488	B1	3/2002 Ginter et al.
5,410,598	A	4/1995 Shear	6,389,402	B1	5/2002 Ginter et al.
5,412,717	A	5/1995 Fischer			
5,428,606	A	6/1995 Moskowitz	EP	0 725 376	8/1996
5,432,849	A	7/1995 Johnson et al.	GB	2 136 175	9/1984
5,438,508	A	8/1995 Wyman	GB	2 236 604	4/1991
5,444,779	A	8/1995 Daniele	JP	62-241061	10/1987
5,453,601	A	9/1995 Rosen	JP	64-068835	3/1989

JP	H03-282733	* 12/1991	..... G06F/9/06
JP	04-369068	12/1992	
JP	05-268415	10/1993	
JP	06-175794	6/1994	
JP	06-215010	8/1994	
JP	07-084852	3/1995	
JP	07-200317	8/1995	
JP	07-244639	9/1995	
JP	0 715 241	6/1996	
WO	WO 92/20022	11/1992	
WO	WO 93/01550	1/1993	
WO	WO 94/01821	1/1994	
WO	WO 96/24092	8/1996	
WO	WO 97/48203	12/1997	
WO	WO 98/11690	3/1998	
WO	WO 98/42098	9/1998	
WO	WO 99/49615	9/1999	
WO	WO 01/63528	8/2001	

## OTHER PUBLICATIONS

Weber, R., "Digital Rights Management Technology" Oct. 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*, Vol. 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, Nov. 1994, *Communications of the ACM*, vol. 37, No. 11.

Ross, P.E., "Data Guard", pp. 101, Jun. 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, Aug. 1992, *Corporation for National Research Initiatives*, Virginia.

Hilts, P. et al., "Books While U Wait", pp. 48-50, Jan. 3, 1994, *Publishers Weekly*.

Strattner, A., "Cash Register on a Chip may Revolutionize Software Pricing and Distribution; Wave Systems Corp.", pp. 1-3, Apr. 1994, *Computer Shopper*, vol. 14, No. 4, ISSN 0886-0556.

O'Conner, M., "New Distribution Option for Electronic Publishers; iOpener Data Encryption and Metering System for CD-ROM use; Column", pp. 1-6, Mar. 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, Jan. 1994, *IMA Intellectual Property Project Proceedings*, vol. 1, Issue 1.

Perrit, Jr., H., "Permission Headers and Contract Law", pp. 27-48, Jan. 1994, *IMA Intellectual Property Project Proceedings*, vol. 1, Issue 1.

Upthegrove, L., "Intellectual Property Header Descriptors: A Dynamic Approach", pp. 63-66, Jan. 1994, *IMA Intellectual Property Proceedings*, vol. 1, Issue 1.

Sirbu, M., "Internet Billing Service Design and prototype Implementation", pp. 67-80, Jan. 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, Jan. 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, Jan. 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, Jan. 1994, *IMA Intellectual Property Project Proceedings*, vol. 1, Issue 1.

Griswold, G., "A Method for Protecting Copyright on Networks", pp. 169-178, Jan. 1994, *IMA Intellectual Property Project Proceedings*, vol. 1 Issue 1.

Nelson, T., "A Publishing and Royalty Model for Networked Documents", pp. 257-259, Jan. 1994, *IMA Intellectual Property Project Proceedings*, vol. 1, Issue 1.

Robinson, E., "Redefining Mobile Computing", pp. 238-240, 247-248 and 252, Jul. 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, Feb. 8, 1995, *Internet Dreams: Archetypes, Myths and Metaphors*.

Henry H. Perritt, Jr., "Technological Strategies for Protecting Intellectual Property in the Networked Multimedia Environment", Apr. 2-3, 1993, *Knowbots, Permissions Headers & Contract Law*.

\* cited by examiner

Figure 1

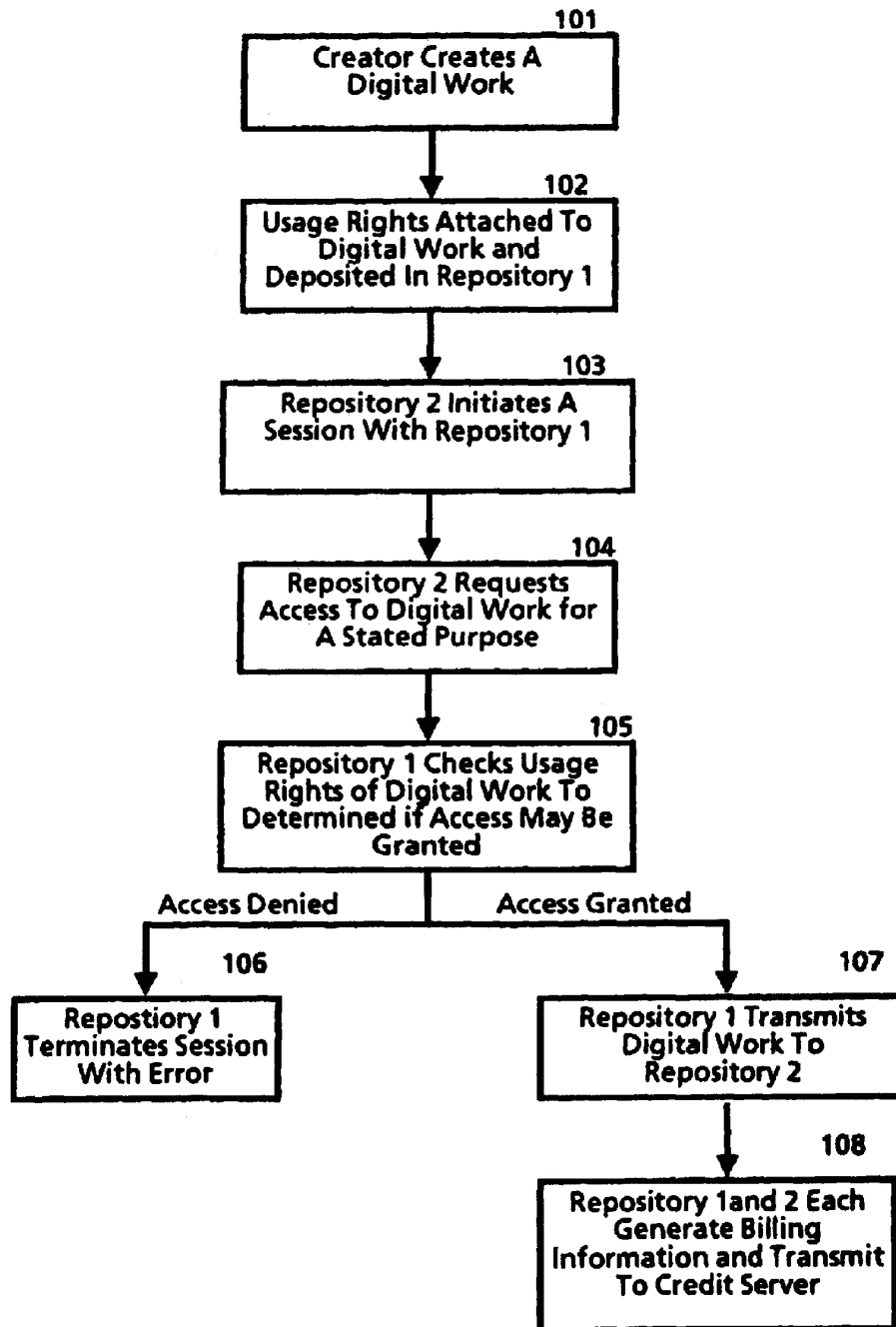


Figure 2

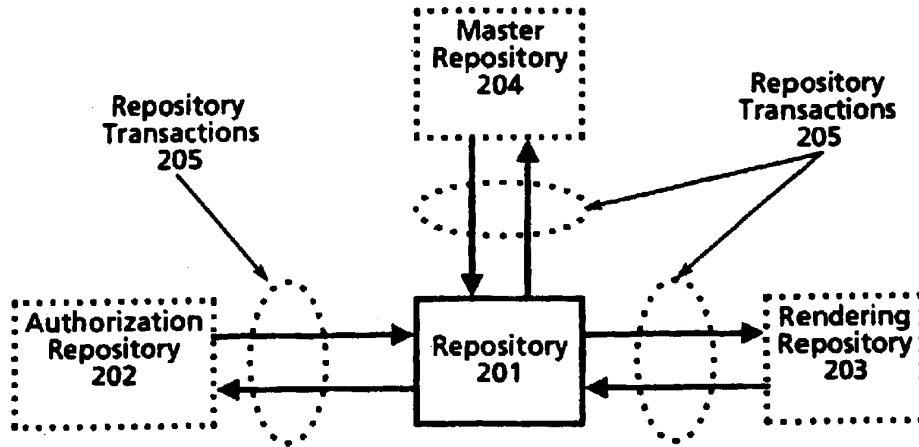
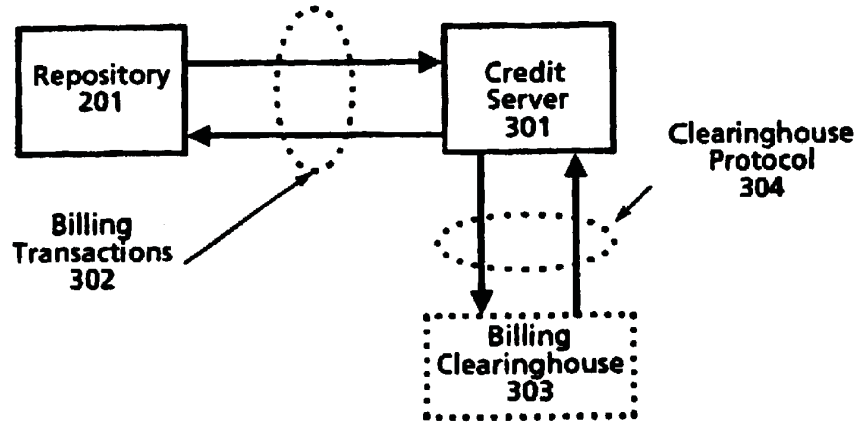


Figure 3



# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.