

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC.
Petitioner

v.

CONTENTGUARD HOLDINGS, INC.
Patent Owner

Case CBM: Unassigned

**PETITION FOR COVERED BUSINESS METHOD PATENT REVIEW OF
U.S. PATENT NO. 7,774,280 UNDER 35 U.S.C. § 321 AND § 18 OF THE
LEAHY-SMITH AMERICA INVENTS ACT**

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EXHIBIT LIST

<i>Google Exhibit #</i>	<i>Description</i>
1001	U.S. Patent No. 7,774,280 to Nguyen et al. (“the ‘280 Patent”)
1002	U.S. Patent No. 5,634,012 to Stefik et al. (“the ‘012 Patent”)
1003	<i>Alice Corp. Pty. Ltd. v. CLS Bank Int’l</i> , 134 S.Ct. 2347 (June 19, 2014)
1004	Complaint, <i>ContentGuard Holdings, Inv. V. Google Inc.</i> , Case No. 2:14-cv-00061-JRG-RSP (E.D. Tex.), Dkt. No. 1
1005	<i>SAP America, Inc. v. Versata Dev. Group, Inc.</i> , CBM2012-00001, Paper 36 (Jan. 9, 2013)
1006	<i>Office Patent Trial Practice Guide</i> , 77 Fed. Reg. 157 (August 14, 2012)
1007	<i>Congressional Record – Senate</i> , 157 Cong. Rec. S1360-1394 (daily ed. March 8, 2011) (Sen. Schumer)
1008	<i>Volusion, Inc. v. Versata Software, Inc. et al.</i> , CBM2013-00017, Paper No. 8 (October 24, 2013)
1009	<i>Salesforce.com, Inc. v. Virtualagility, Inc.</i> , CBM2013-00024, Paper No. 47 (Sept. 16, 2014)
1010	<i>Google Inc. v. Inventor Holdings, LLC</i> , CBM2014-00002, Paper No. 16 (April 1, 2014)
1011	<i>Experian Marketing Solutions, Inc. v. RPost Communications Ltd.</i> , CBM2014-00010, Paper No. 20 (April 22, 2014)
1012	<i>Apple Inc. v. Sightsound Techs., LLC</i> , CBM2013-00019, Paper No. 17 (October 8, 2013)
1013	<i>Hulu, LLC v. Intertainer, Inc.</i> Case CBM2014-00053, Paper 11 (June 23, 2014)
1014	Declaration of Benjamin Goldberg, Ph.D.
1015	Bray et al., “Extensible Markup Language (XML) 1.0,” W3C Recommendation, February 10, 1998
1016	<i>Reserved</i>
1017	<i>Bloomberg Inc. et al. v. Markets-Alert PTY LTD</i> , CBM2013-00005, Paper No. 18 (Mar. 29, 2013)
1018	Definition of “Meta,” Oxford English Dictionary www.oxforddictionaries.com/definition/english/meta

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Google Exhibit #	Description
1019	Definition of “Right,” Merriam-Webster Online Dictionary, available at http://www.merriam-webster.com/dictionary/right
1020	Definition of “Variable,” The Free Dictionary, available at http://www.thefreedictionary.com/variable+%28computer+science%29
1021	<i>ZTE Corp. and ZTE (USA) Inc. v. ContentGuard Holdings</i> , IPR2013-00133, Paper No. 61 (July 1, 2014)
1022	File History for U.S. Patent No. 7,774,280, March 29, 2010 Notice of Allowance
1023	<i>EBay, Inc. v. Paid, Inc.</i> , CBM2014-00125, Paper No. 15 (Sept. 30, 2014)
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1028	<i>Reserved</i>
1029	<i>Ultramercial, Inc. et al v. Hulu, LLC et al.</i> , 2010-1544 (Fed Cir. November 14, 2014)
1030	U.S. Patent No. 5,629,980 to Stefik et al. (“the ‘980 Patent”)

I. INTRODUCTION

Google Inc. (“Google” or “Petitioner”) petitions for Covered Business Method Patent Review (“Petition”), seeking cancellation of claims 1, 5, 11, 12 and 22 of U.S. Patent No. 7,774,280 to Nguyen et al. (“the ‘280 Patent”) (*See* GOOG-1001), owned by ContentGuard Holdings, Inc. (“ContentGuard” or “Patent Owner”).

II. OVERVIEW OF THE ‘280 PATENT AND PETITIONER’S CHALLENGE

The ‘280 Patent is directed generally to digital rights management (“DRM”) and specifically to the concept of transferring “usage rights” that grant one or more users access to digital content, like a movie or an eBook. (*See* GOOG-1001, 1:36-51; 2:51-64; 12:41-46; 13:65-14:43.) The ‘280 Patent describes known ways of implementing DRM over the internet, where content owners or distributors attach prescribed usage rights to digital content. (*See* GOOG-1001, 2:14-29.) The usage rights define one or more manners of use, *i.e.*, how a recipient of the content may use the digital content. (*See id.*, 2:14-16.) For example, an owner or distributor of digital content may grant the recipient of the digital content the usage rights for “viewing only.” (*Id.*, 2:16-18; *see also id.*, 2:9-14.) Conditions on use may also be included with the usage rights such that “usage rights can be contingent on payment or other conditions.” (*Id.*, 2:18-19.) The ‘280 Patent describes known, prior art DRM concepts like “authentication, authorization, accounting, payment

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and financial clearing, rights specification, rights verification, rights enforcement, and document protection” that are described in U.S. Patent No. 5,634,012 (“the ‘012 Patent”), which is incorporated by reference into the ‘280 Patent specification. (See GOOG-1001, 1:34-43; 2:9-16; GOOG-1014, ¶¶ 20, 21.)

The ‘280 Patent specification describes two drawbacks of the prior art. First, it says that content owners cannot control the use of content by downstream users unless the content owners remain a party to the transaction:

DRM systems have facilitated distribution of digital content by permitting the content owner to control use of the content. However, known business models for creating, distributing, and using digital content and other items involve a plurality of parties. For example, a content creator may sell content to a publisher who then authorizes a distributor to distribute content to an on-line storefront who then sells content to end-users. Further, the end users may desire to share or further distribute the content. In such a business model, usage rights can be given to each party in accordance with their role in the distribution chain. However, the parties do not have control over downstream parties unless they are privy to any transaction with the downstream parties in some way. For example, once the publisher noted above provides content to the distributor, ***the publisher cannot readily control rights granted to downstream parties, such as the first or subsequent users unless the publisher remains a party to the downstream transaction.*** This loss of control combined with the ever

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increasing complexity of distribution chains results in a situation which hinders the distribution of digital content and other items.

(GOOG-1001, 2:22-42 (emphasis added).) In addition to the issue of downstream control of content, the ‘280 Patent also notes that the prior art fails to provide a facility for allowing a downstream party to grant rights that are different from the rights held by the downstream party itself:

Further, the publisher may want to prohibit the distributor and/or the storefront from viewing or printing content while allowing an end user receiving a license from the storefront to view and print. Accordingly, the concept of simply granting rights to others that are a subset of possessed rights is not adequate for multi-party, i.e. multi-tier, distribution models.

(GOOG-1001, 2:42-48; GOOG-1014, ¶ 22.)

The ‘280 Patent purports to address these shortcomings by the claimed use of “meta-rights” and “state variables.” Meta-rights are usage rights that permit the granting of rights to others, *i.e.*, meta-rights are rights that allow a recipient of the right to create a new usage right and send that new usage right on to another party.

(GOOG-1001, 5:47-56.) State variables track dynamic state conditions. (*Id.*, 8:3-16.) (GOOG-1014, ¶ 23.)

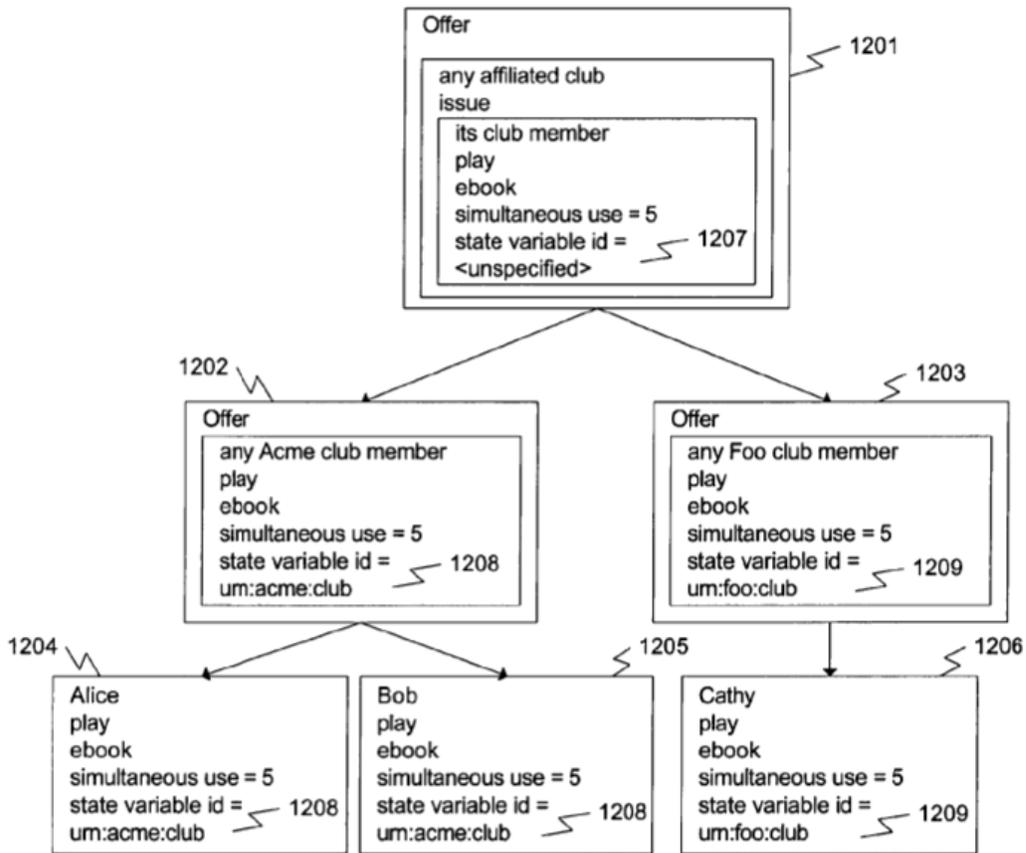


Fig. 12

As an example, as shown by Figure 12 of the ‘280 Patent, a creator of digital media (1201) offers usage rights to a distributor of digital media (1202 and 1203). The usage rights provided by the content creator to the distributors include meta-rights, which grant the distributor the rights to provide “play” right to users of the digital content further down the distribution chain in the form of licenses (1204, 1205 and 1206). State variables track the “play” right exercised by the user (e.g., Alice, Bob and Cathy). The “play” right is limited to 5 concurrent plays for each organization (urn:acme:club, urn:foo:club) and the play uses are tracked by the

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respective state variables. (*Id.*, 12:57-13:8.) Here, state variables are counters where a state represents the number of times the “play” right is exercised. (*Id.*, 13:9-17; 13:54-64.) (GOOG-1014, ¶ 24.)

As will be fully described by this Petition, the ‘012 Patent, which is incorporated by reference into the ‘280 Patent and issued more than four years before the earliest priority date of the ‘280 Patent, describes every element of the challenged claims. The ‘012 Patent describes usage rights in which a “Next-Set-of-Rights” may be specified. (*See* GOOG-1002; Fig. 15; Element 1509.) Like a meta-right, this “Next-Set-of-Rights” allows a creator of usage rights to specify a set of usage rights that the receiver of the rights may create and provide to a next party. Further, the ‘012 Patent describes the use of state variables that can track changing conditions relating to a created right, such as the “Copies-in-Use” and “Copy-Count” variables, that count and limit the number of “copies” of the work that may be exercised simultaneously for the right. (*Id.*, 10:51-54; 22:2-5.)

As demonstrated by this Petition, the challenged claims of the ‘280 Patent are anticipated and/or rendered obvious by the prior art ‘012 Patent that is incorporated by reference into the specification of the ‘280 Patent. The ‘280 patent does not claim priority and has no direct relationship to the ‘012 Patent.

This Petition will also show that the ‘280 Patent claims subject matter that is not patentable under 35 U.S.C. § 101. During the prosecution of the ‘280 Patent,

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the examiner twice rejected the pending claims based on “101 issues.” In response to the examiner’s rejection, the Patent Owner amended the independent claims to recite use of “a repository,” “a computer-implemented method” and to recite that meta-rights are in “digital form,” to render the claims patentable under the then-dispositive “machine or transformation” test. However, the Supreme Court and Federal Circuit’s recent decisions involving Section 101 have made clear that the “machine or transformation” test applied by the ‘280 Patent examiner is no longer controlling; and those decisions vitiate Patent Owner’s attempts to secure claims covering abstract ideas simply by adding language reciting generic and well-known computer processing steps and devices. For this additional reason, the challenged claims are invalid. (*See generally* GOOG-1003.)

III. MANDATORY NOTICES

Real Party-in-Interest: In accordance with 37 C.F.R. § 42.8(b)(1), Petitioner identifies Google Inc. as the real Party-in-Interest.

Related Matters: In accordance with 37 C.F.R. § 42.8(b)(2), Petitioner identifies the following related proceedings:

- 1) *ContentGuard Holdings, Inc. v. Google Inc.*, No. 2:14-cv-00061-JRG-RSP (E.D. Tex.), filed February 5, 2014 (referred to hereafter as “the Litigation”);

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- 2) *Google Inc. v. ContentGuard Holdings, Inc.*, No. 3:14-cv-00498-WHA (N.D. Cal.),¹ filed January 31, 2014;
- 3) *ContentGuard Holdings, Inc. v. Amazon.com Inc. et al.*, No. 2:13-cv-01112-JRG (E.D. Tex.), filed December 18, 2013 (collectively, the “Related Litigations.”); and
- 4) Petition for Covered Business Method Review for U.S. Patent No. 8,001,053.

Designation of Lead and Back-Up Counsel: In accordance with 37 C.F.R.

§ 42.8(b)(3):

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Notice of Service Information: In accordance with 37 C.F.R. § 42.8(b)(4), please direct all correspondence to lead and back-up counsel at the above address.

¹ Google did not challenge the validity of the ‘280 Patent in this declaratory judgment action.

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Petitioners consent to email service at Robert.Laurenzi@kayescholer.com and CBM7774280-1@kayescholer.com

IV. GROUNDS FOR STANDING (37 C.F.R. § 42.304(a))

The undersigned and Google certify that the '280 Patent is available for post-grant review because the '280 Patent constitutes a covered business method patent as defined by Section 18 of the America Invents Act. *See* AIA § 18(a)(1)(A). The AIA defines covered business method patents as patents that relate to financial products or services and are not directed towards a technological invention. AIA § 18(d)(1). For the reasons described below, the '280 Patent satisfies both of these requirements.

Further, Google meets all standing requirements and maintains full eligibility to file this petition. A petitioner may not file a petition to institute a covered business method review unless the petitioner has been sued for patent infringement. 37 C.F.R. § 42.302(a). Here, ContentGuard has sued Google for infringement of the '280 Patent. (*See, e.g.,* GOOG-1004.) Thus, Google has standing to file the present petition.

Also, a petitioner may not file a petition for covered business method review where the petitioner is estopped from challenging the claims. 37 C.F.R. § 42.302(b). Google is not estopped from challenging the claims of the '280 Patent on the grounds herein.

A. The ‘280 Patent is Directed to a Covered Business Method

The ‘280 Patent is eligible for CBM review. The ‘280 Patent is directed to a covered business method because the claims are used in financial services and are not directed to a technological invention.

1. The ‘280 Patent claims methods and systems used in financial services

The AIA defines a covered business method patent as a “patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service ...” AIA § 18(d)(1); *see also* 37 C.F.R. § 42.301. Under covered business method review, “financial product or service” is “broadly interpreted and encompass[es] patents claiming activities that are financial in nature, incidental to a financial activity or complementary to a financial activity.” (*See* GOOG-1005 at 21-22 (citing GOOG-1006 at 2-3).) In this context, financial “is an adjective that simply means relating to monetary matters.” (*See* GOOG-1005 at 23.) The “presence of a single claim is sufficient to institute a covered business method review.” (*Id.* at 26.) The U.S.P.T.O. noted that the AIA’s legislative history demonstrates that “financial product or service” should be “interpreted broadly,” encompassing patents claiming activities that are “financial in nature, incidental to a financial activity or complementary to a financial activity.” (*See* GOOG-1006 at 3.) Of particular pertinence to the ‘280 Patent, Sen. Schumer, co-author of § 18,

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stated “[t]o meet this [eligibility] requirement, the patent need not recite a specific financial product or service. Rather, the patent claims must only be broad enough ***to cover*** a financial product or service.” (See GOOG-1007 at 6 (emphasis added).)

In *Volusion v. Versata* (See GOOG-1008 at 6), the PTAB ruled that although the claims merely recited a method of representing a plurality of items in a database, the specification pointed out that the invention could be used in the field of e-commerce and were therefore eligible for Covered Business Method review. (See GOOG-1008 at 7-8; *see also* GOOG-1009 at 7-8 (finding that items displayed to a user may be associated with a financial service).) Thus, a claim need not map directly to a monetary or financial activity to qualify for covered business method review, but need only have claims that encompass embodiments that are financial in nature, incidental to financial activity or complementary to a financial activity. (See GOOG-1010 at 8.)

The claims of the ‘280 Patent encompass embodiments that facilitate the use or distribution of digital content based on the payment of fees by users, thus rendering the claims, at the very least, incidental and complementary to financial activity. The ‘280 Patent claims describe the purported invention using economic terms - the claimed system and method facilitate the transfer of rights between a rights “supplier” and a rights “consumer.” (GOOG-1001, 2:52-55.) To this end, the independent claims of the ‘280 Patent are all directed toward “obtaining a set of

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rights” by the consumer including “meta-rights” relating to an item such as digital content. (*See id.*, 15:10-11; 15:55-56; 16:37-38.) The ‘280 Patent specification confirms the financial nature of this claimed content acquisition activity, including the purchase of digital assets and the payment of fees. (*See, e.g., id.*, 4:3-14.)

The specification describes the claimed rights as being contained in a license. Digital content is provided by way of a license in exchange for a monetary fee:

Rights label 40 is associated with content 42 and specifies usage rights and possibly corresponding conditions that can be selected by a content recipient. License Server 50 manages the encryption keys and issues licenses for protected content. These licenses embody the actual granting of usage rights to an end user. For example, rights label 40 may include *usage rights permitting a recipient to view content for a fee of five dollars and view and print content for a fee of ten dollars*. License 52 can be issued for the view right *when the five dollar fee has been paid*, for example. Client component 60 interprets and enforces the rights that have been specified in license 52.

(*Id.*, 4:3-14 (emphasis added).) Later, when describing conditions that must be satisfied to exercise the claimed “right” from the license, the specification explains that conditions may be based on payment of a fee: “[f]or, example, [*sic*] a condition may be *the payment of a fee*, submission of personal data, or any other requirement desired before permitting exercise of a manner of use.” (*Id.*, 4:39-43;

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see also id., 5:4-11 (emphasis added).) The specification of the ‘280 Patent also discusses the use of a financial clearinghouse to process transactions and verify payment relating to the claimed rights transfers. (*Id.*, 5:35-37.)

The ‘280 Patent thus describes and claims embodiments necessitating the payment of fees in exchange for licenses for content usage, *i.e.*, e-commerce embodiments that are directed to the buying and selling of products or services over electronic systems that comports with “an agreement between two parties stipulating movements of money or other consideration now or in the future.” (GOOG-1011 at 6, citing GOOG-1012 at 12 (internal citations omitted).) The use of licenses are required by challenged claims 11 and 22. These are activities that are “complementary to a financial activity” and “relate to monetary matters” and therefore place the ‘280 Patent within the ambit of CBM review. (*Id.* at 12.)

The ‘012 Patent, which is incorporated by reference into the ‘280 Patent, is also replete with references to financial activities relating to the distribution and use of digital content. The ‘280 Patent incorporates portions of the ‘012 Patent concerning financial matter, including “accounting, payment [and] financial clearing” as well “rights specification, rights verification [and] rights enforcement.” (GOOG-1001, 1:37-43; *see also id.*, 5:43-46.) Thus, those parts of the ‘012 Patent concerning financial aspects of DRM activities as they relate to the claimed “rights,” “meta-rights” and “state variables” may be considered part of the

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specification of '280 Patent specification and support the notion that disclosed embodiments of the claimed methods and system are financial in nature. 37 C.F.R. 1.57(b)(1); *In re Lund*, 376 F.2d 982, 989 (C.C.P.A. 1967).

The '012 Patent describes financial products and services relating to licenses for claimed "rights" for digital content such as credit servers that process "the recording and reporting of . . . fees . . . associating fees with rights." (GOOG-1002, 17:51-55.) These allow for a "wide range of charging modes" whereby "the credit server would store the fee transactions and periodically communicate via a network with billing clearinghouse for reconciliation." (*Id.*, 17:53-54; 18:15-19; *see also id.*, 17:46-18:51; Fig. 4b.) Further, the '012 Patent discloses a usage rights language having a grammar with entries for attaching fees to rights to digital content. Specifically, the '012 Patent states that "the billing for use of a digital work is fundamental to a commercial distribution system" (*id.* at 24:48-49) and provides a particular grammar element that can be used to define a "range of options for billing the use of digital works": "Fee-Spec:={Scheduled-Discount} Regular-Fee-Spec|Scheduled-Fee-Spec|Markup-Spec." (*Id.*, 24:48-52; *see generally id.*, 24:48-26:13; Fig. 15; Elements 1517-1525.) The '012 Patent specification describes multiple examples of the use of fee-based grammar elements (*id.*, 27:15-41), and provides a detailed example of a billing transaction (*id.*, 31:1-47), all in the context of the processing and use of "usage rights." The

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'012 Patent also discloses the use of state variables relating to fee-based usage rights. Table 1 of the '012 Patent specification, for example, describes “Digital Work State Information” and includes a property called “Revenue-Owner” which identifies “a revenue owner for a digital work. . . used for reporting usage fees.” (*Id.*, 10:46-47; 10:65-11:7.) Thus, the portions of the '012 Patent incorporated by reference into the '280 Patent, and therefore constituting a part of the '280 Patent specification, further evidence that embodiments of the claimed licenses, meta-rights and state variables are financial in nature and incidental and complementary to financial transactions involving payment for rights to digital content.

As further confirmation that the '280 Patent is subject to CBM review, the USPTO has stated that “patents subject to covered business method patent review are anticipated to be typically classifiable in Class 705.” (GOOG-1006 at 7.) The USPTO defines class 705 as “Data Processing: Financial, Business Practice, Management, or Cost/Price Determination.” Manual of Patent Classification, Class 705. While not dispositive, the USPTO classified the '280 Patent at issue in Class 705/59, the very class (705) where covered business method patents are expected to be found. (*See* GOOG-1001, cover page.)

Because the '280 Patent covers disclosed embodiments that are financial in nature relating to monetary matters, and because the '280 Patent is within the

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expected classification for CBM patents, the ‘280 Patent satisfies the first prong of eligibility for Section 18 CBM review.

2. The ‘280 Patent is not directed to a technological invention

The AIA excludes “patents for technological inventions” from the definition of CBM patents. AIA § 18(d)(1); 37 C.F.R. § 42.301(a). To be directed to a technological invention, (1) the claimed subject matter as a whole must recite a technological feature that is novel and unobvious over the prior art; *and* (2) it must solve a technical problem using a technical solution. 37 C.F.R. § 42.301(b) (emphasis added.). Merely “[r]eciting the use of known prior art technology to accomplish a process or method,” or simply “[c]ombining prior art structures to achieve the normal, expected, or predictable result of that combination” typically do not make for a technological invention. (GOOG-1006 at 30-31.) Both prongs must be satisfied for a patent to be excluded from covered business method review for being a technological invention. (See GOOG-1013 at 14.) If even one claim of a patent is not directed to a “technological invention,” the exception does not apply. (GOOG-1006 at 4.) Under this framework, the ‘280 Patent claims do not meet the requirements of a “technological invention.” Not only do the claims of the ‘280 Patent fail to recite a novel and unobvious technological feature, but they also do not solve a technical problem using a technical solution.

i. The claimed subject matter as a whole does not recite a technological feature that is novel and unobvious over the prior art

Turning to the first prong, the ‘280 Patent does not recite a novel or unobvious feature over the prior art. The preamble of method claim 1 recites a “computer-implemented method for transferring rights adapted to be associated with items from a rights supplier to a rights consumer.” (GOOG-1001, 15:7-9.) Independent apparatus claim 12 recites a generic “system” for doing the same. (*Id.*, 15:52-54; 16:33-35.) The limitations of the claims following the preamble implicate technologies or concepts (such as rights, repositories, and state variables) known at the time to accomplish the claimed transferring of rights and recite no novel technological feature.² (*See* GOOG-1005 at 27-28.) (GOOG-1014, ¶ 38.)

The ‘280 Patent specification admits that the technology described for accomplishing the claimed steps and means were well known. Figure 1 illustrates “a rights management system in accordance with the preferred embodiment.” (GOOG-1001, 3:15-16.) It is a “DRM system that can be used in connection with the preferred embodiment” and utilizes a web server in a generic client-server environment. (*Id.*, 3:55-58; Fig. 1.) Any digital communication channel may be used to interconnect the various devices. (*Id.*, 6:27-31.) The ‘280 Patent

² The earliest possible priority date for the ‘280 Patent is June 7, 2001. *See infra* at 56 for discussion of the ‘280 Patent’s priority date.

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emphasizes repeatedly that the inventive concept is not limited to a particular technological implementation, even with regard to the construction and operation of the various servers themselves. (*Id.*, 9:28-32.) In fact, the specification concludes with an emphatic statement by patentee as to the generic nature of the invention's hardware implementation:

The invention can be implemented through any type of devices, such as computers and computer systems. The preferred embodiment is implemented in a client server environment. However, the invention can be implemented on a single computer or other device. Over a network using dumb terminals, thin clients, or the like, or through any configuration of devices. The various modules of the preferred embodiment have been segregated and described by function for clarity. However, the various functions can be accomplished in any manner through hardware and/or software. The various modules and components of the preferred embodiment have separate utility and can exist as distinct entities. Various communication channels can be used with the invention. For example, the Internet or other network can be used. Also, data can be transferred by moving media, such as a CD, DVD, memory stick or the like, between devices. Devices can include, personal computers, workstations, thin clients, PDA's and the like.

(GOOG-1001, 14:50-67.) Thus, there is no new technological invention proffered in the '280 Patent as to hardware. (GOOG-1014, ¶ 39.)

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Claim 1 recites the use of a “repository.” (GOOG-1001, 15:14-15.) Claim 12 also recites use of a processor in a repository as “means for” accomplishing the various steps of claim 1, every one of which implicates the repository (*see infra* at 71-74) discussing the means plus function claims). Like the above-described generic computer components, the claimed “repository” is also prior art, and its construction and operation is fully disclosed in five columns of the ‘012 Patent. (*See* GOOG-1002, 12:41-17:45.) Likewise, the ‘280 Patent’s claimed “state variable” (GOOG-1001, 15:20; 15:65) is also disclosed in the prior art ‘012 Patent. (GOOG-1002, 32:8-18; 32:37-51; 32:61-33:33; Fig. 18; *see infra* at VIII.C for a full discussion of the claimed elements of the ‘280 Patent found in the ‘012 Patent.)

The ‘280 Patent’s discussion of a “rights language” called XrML for specifying rights and conditions does not evidence a technological invention. (*See* GOOG-1001, 4:28-30; 8:17-25; Fig. 4.) This language is nothing more than description of rights embodied in an XML-based format. (*See* GOOG-1014 at ¶ 40.) XML was well known in the art at the time of the priority date of the ‘280 Patent and cannot therefore be considered inventive. (*See generally* GOOG-1015; *see also* GOOG-1014 at ¶ 40.) Further, the ‘280 Patent admits that XrML, the specific implementation of XML discussed in the specification was itself already well known. (*See* GOOG-1001, 8:24-25.) Regardless, the specification further

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acknowledges that use of XrML is not critical to the invention insofar as “the rights can be specified in any manner.” (*Id.*, 4:53-55.) Thus, there is no technological inventiveness to be found in the software and programming elements of the challenged claims.

While the individual steps and elements of claims 1 and 12 lack technological novelty and unobviousness, so too do the claims as a whole. Indeed, the use of the combined steps and elements of the respective claims would achieve only the normal, expected or predictable result of the combinations. (*See* GOOG-1006 at 30-31.) Claim 1 recites a “method for transferring rights adapted to be associated with items from a rights supplier to a rights consumer.” This overall concept is disclosed in the ‘012 Patent (“[t]he usage rights define how the digital work may be used or further distributed by a processor of the digital work.” (GOOG-1002, 4:6-8).) The three claim elements that follow, together, purport to accomplish the recited “transferring” by the steps of obtaining the rights, determining if the consumer is entitled to the rights and then exercising the rights if allowed. (GOOG-1001, 15:5-22.) Since the rights are nothing more than digital data, the entire process takes place within the context of mere creation and transfer of said digital data from one computing element to another, a well-known process. (*See* GOOG-1014 at ¶ 41.) For this very reason, as already noted above, the ‘280 Patent teaches that “the invention can be implemented through any type of devices,

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such as computers and computer systems.” (*Id.*, 14:50-51.) As further noted above, none of the claimed and disclosed computing elements, nor the communications network itself, is new or non-obviousness. Similarly, the manner in which the digital data comprising the usage rights is expressed (an XML-based language) also is not new. (*Supra.* at 18.) The claimed process ends as would be expected, with the transfer of digital data from one location to other locations by way of known computing and network elements. (*See* GOOG-1014 at ¶ 22.) No novel way of processing or transmitting digital data is disclosed or claimed. The specification does not describe or note any unexpected or unpredictable outcome resulting from the technology used. All of the claimed concepts and devices were well known and commonly used before the ‘280 Patent’s earliest-possible priority date, both individually and collectively. Therefore, the claims fail at least the “technological feature is novel and non-obvious” prong of the technological invention exception.

ii. The claimed subject matter does not solve a technical problem using a technical solution

The analysis could stop here—the “technological invention” exception does not apply when even one prong of the definition is not met. Yet, the subject matter claimed in the ‘280 Patent also fails to meet the second prong: the claimed subject matter does not solve a technical problem using a technical solution.

The ‘280 Patent explains that the problem addressed by the alleged inventions of the ‘280 Patent concerns a particular known “business model” for

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creating, distributing and using digital content involving a plurality of parties. (GOOG-1001, 2:24-26.) As the '280 Patent explains, a content creator loses control of content when it sells content to a publisher who then authorizes a distributor to distribute the content to an on-line store who, in turn, then sells the content to customers. (*See id.*, 2:26-29.) Specifically, the content creator in this example loses control over the rights exercised by the customer who purchased the content from the distributor. (*Id.*, 2:32-39.) The '280 Patent purports to solve the content owner's problem and allow the content owner to control the use of its work in such a multi-tiered distribution model. (*Id.*, 2:52-64.) This attempt to facilitate content owners' control and commercial exploitation of their content through licensing of rights to content is not technical, but instead addresses the shortcomings of the existing "business model." (GOOG-1014, ¶¶ 43, 44.)

The proposed solution to the problem addressed by the '280 Patent is the creation of a right that can itself be used to generate additional rights, a meta-right (*id.*, 2:52-62), and the use of a state variable to keep track of the status of the additional right. (*Id.*, 2:62-65.) Neither is a technological solution because both can be accomplished by a human with pencil and paper. Creation of rights and subsequent rights can be accomplished by the drafting of a legal contract conveying a privilege to use content, like a copy of a movie. A human keeping a count of an event, like the number of times a movie is loaned, can play the role of a

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state variable. (See GOOG-1014 at ¶ 45.) Thus, the business problem is solved with a business solution. (See GOOG-1005 at 27.) (“None of these claim limitations, taken alone or in combination, rises to the level of a technological feature as the claimed method steps could be performed by one of ordinary skill in the art with pencil and paper.”). (GOOG-1014, ¶ 45.)

Patent Owner may argue that the business problem addressed concerns the use of technology to accomplish the transfer of content that is itself embodied in a “technological” form (“digital work”) and, therefore, that the claims must fall into the “technological exception.” (GOOG-1001, 1:24-29.) But the technology implicated by the claims was already known, and in this regard, the legislative history counsels towards a narrow definition of “technical” problems and solutions. (GOOG-1006 at 5.) Simply reciting technological features or combining known technology in a new way for processing is not sufficient:

[The technological inventions exception] is not meant to exclude patents that use known technology to accomplish a business process or method of conducting business —whether or not that process or method appears to be novel. The technological invention exception is also not intended to exclude a patent simply because it recites technology. For example, the recitation of computer hardware, communication or computer networks, software, memory, computer-readable storage medium, scanners, display devices or databases, specialized machines, such as an ATM or point of sale device, or

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other known technologies, does not make a patent a technological invention. In other words, a patent is not a technological invention because it combines known technology in a new way to perform data processing operations.”

(GOOG-1007 at 5.) (emphasis added.). In other words, merely being related to technology, implicating technology or using technology (such as a “digital work”) does not qualify a patent for the technological invention exception. The novelty of transferring digital content, as opposed to content not in a “technological” form, is of no relevance in determining whether the subject matter of the claim falls within the Section 101 categories of possibly patentable subject matter. *Diamond v. Diehr*, 450 U.S. 175, 189 (1981). The technology itself must be novel.

As described above (*supra* at IV.A.2.i), the technology utilized to solve the business problem propounded by the ‘280 Patent relies on well-known technologies related to the field of digital rights management. Prescribing rights and conditions related to the licensing of content is not “technical” in nature, nor is it an improvement on existing computing technology. Instead, the ‘280 Patent uses existing technology, including that disclosed in the ‘012 Patent, to prescribe additional conditions or rights in licensing digital content. The ‘280 Patent describes no unconventional software, computing equipment, tools or processing capabilities; it only presents an idea aimed at increasing the commercial exploitation of licensing digital content. “[A]bstract business conceptions and their

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implementation, whether in computers or otherwise,” are not included in the definition of “technological inventions.” (GOOG-1017 at 96.) The use of repositories to implement the abstract ideas or to construct the system of the apparatus claims simply results in the normal, expected, and predictable result of the combination: enforcing usage rights and meta-rights and allowing one or more users to create new rights in a traditional licensing environment. The enforcement and granting of rights is activity that does not require the use or implementation of anything other than known computing features included in the claims. (*See* GOOG-1014 at ¶¶ 46, 47.)

Claims having only technical features known in the prior art do not fall under the technological invention exception. (*See* GOOG-1017 at 7-9.) The technological features recited in the challenged claims of the ‘280 Patent are all disclosed in the ‘012 Patent. A “repository” is recited in the “obtaining” and “determining” steps of challenged claim 1 in the ‘280 Patent. A repository is similarly disclosed in the ‘012 Patent. (*See* GOOG-1002, 12:41-17:45.) The remaining subject matter of challenged claim 1 is implemented using “computer-implemented” steps to create data in “digital form” for transfer over known communications networks. Software operating on servers, like repositories, was well known at the priority date of the ‘280 Patent, as were communications networks like the Internet. (*See* GOOG-1001, 14:62-63; *see also* GOOG-1014 at ¶

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46.) Even the purportedly novel features of the ‘280 Patent, meta-rights and state variables, are implemented using nothing more than simple software programming concepts giving the known processors the ability to create and parse XML elements such as those shown in Figure 4 of the ‘280 Patent. (*See* GOOG-1014 at ¶

48.) Since all of the technical features of claim 1 were disclosed in the prior art ‘012 Patent, or were well known in the art, the solution to the problem cannot be a technical solution and the claims do not therefore fall under the technological invention exception.

V. CLAIMS FOR REVIEW

Google requests review of claims 1, 5, 11, 12 and 22 of the ‘280 Patent.

VI. IDENTIFICATION OF THE CHALLENGE

Ground 1: Claims 1, 5, 11, 12 and 22 are invalid as unpatentable under 35 U.S.C. § 101 as being directed to non-statutory abstract subject matter;

Ground 2: Claims 1, 5, 11, 12 and 22 are invalid as anticipated in view of 35 U.S.C. § 102(a) and (b) over U.S. Patent No. 5,634,012 of Stefik, et al. (“the ‘012 Patent”); and

Ground 3: Claims 1, 5, 11, 12 and 22 are invalid as obvious in view of 35 U.S.C. § 103 over the ‘012 Patent and the knowledge of one of ordinary skill in the art.

VII. CLAIM CONSTRUCTION

In a covered business method patent review, claim terms in an unexpired patent are given their broadest reasonable construction in light of the specification of the patent in which they appear.³ 37 C.F.R. § 42.300(b). Under the broadest reasonable construction standard, claim terms are given their ordinary and customary meaning as would be understood by one of ordinary skill in the art at the time of the invention in the context of the entire patent disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). An inventor may rebut that presumption by providing a definition of the term in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir.1994). In the absence of such a definition, limitations are not to be read from the specification into the claims. *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993).

Here, the claim terms of the '280 Patent should be given their plain and ordinary meaning, and the few terms that warrant construction are discussed.

³ Because the claim construction standard in a CBM is different than that used in litigation, Petitioner expressly reserves the right to present different constructions of terms in the Litigation. *See In re Am. Acad. Of Sci. Tech. Ctr.*, 367 F.3d 1359, 1369 (Fed. Cir. 2004).

A. Meta-right

“Meta” in its broadest sense means “self-referential.” (GOOG-1018.) Thus, the broadest reasonable construction of a “meta-right” is “a right about a right.” This broad construction is consistent with the specification’s multiple and varied descriptions of meta-rights.

First, the specification says that meta-rights are an extension of another kind of right, namely, the known “usage right,” which is disclosed in the ‘012 Patent. (See GOOG-1002, 5:43-47.⁴) The specification of the ‘280 Patent states that the usage rights control how the recipient can use the content, in this case a digital document: “[u]sage rights define one or more manners of use of the associated document content and persist with the document content.” (GOOG-1001, 2:14-16.) The ‘280 Patent specification further provides examples of usage rights, such as play and print: “rights label 40 may include usage rights permitting a recipient to view content for a fee of five dollars and view and print content for a fee of ten dollars.” (*Id.*, 4:8-10.) Further, the ‘280 Patent’s discussion of usage rights in the Background section is provided in the context of the incorporated ‘012 Patent

⁴ The ‘980 Patent here refers to U.S. Patent No. 5,629,980 (“the ‘980 Patent,” GOOG-1030), which has a nearly identical specification to that of the ‘012 Patent. The definition of usage rights in the ‘980 Patent, which is identical to that of the ‘012 Patent, is found at 51:65-67.

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specification. (*Id.*, 2:9-14.) Usage rights are explicitly defined in the specification of the '012 Patent:

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.

(GOOG-1002, 53:48-51.) With this understanding of usage rights and the notion that meta-rights are an extension of usage rights, the '280 Patent states that meta-rights “can be thought of as usage rights to usage rights (or other meta-rights).”

(GOOG-1001, 5:49-51.) The specification then provides the following description of meta-rights and includes examples of their use:

Meta-rights can include derivable rights to offer rights, grant rights, negotiate rights, obtain rights, transfer rights, delegate rights, expose rights, archive rights, compile rights, track rights, surrender rights, exchange rights, and revoke rights to/from others. Meta-rights can include the rights to modify any of the conditions associated with other rights. For example, a meta-right may be the right to extend or reduce the scope of a particular right. A meta-right may also be the right to extend or reduce the validation period of a right. Metarights can be hierarchical and can be structured as objects within objects. For example, a distributor may have a metaright permitting the distributor to grant a meta-right to a retailer which permits the retailer to grant users rights to view content. Just as rights can have conditions, meta-rights can also have conditions. Meta-rights can also be associated with other meta-rights.

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(GOOG-1001, 5:52-67.) The specification further describes meta-rights in the context of the earlier-described problem to be solved: “the publisher cannot readily control rights granted to downstream parties, such as the first or subsequent users unless the publisher remains a party to the downstream transaction.” (GOOG-1001, 2:36-39.) To meet this challenge, the ‘280 Patent states that meta-rights “are particularly useful” where “distribution models may include entities that are not creators or owners of digital content, but are in the business of manipulating the rights associated with the content.” (*Id.*, 6:1-4.) In other words, meta-rights facilitate downstream control by upstream parties through the distribution of rights that can, themselves, create new rights:

in a multi-tier content distribution model, intermediate entities (e.g., distributors) typically will not create or use the content but will be given the right to issue rights for the content they distribute. In other words, the distributor or reseller will need to obtain rights (meta-rights)

(GOOG-1001, 6:5-10.) Here, the upstream parties use meta-rights to control how subsequent downstream parties in the chain use digital content, and also to control how those parties manipulate and then pass on rights to the digital content to other parties in the distribution chain through the use and manipulation of usage rights.

The various discussions and examples of meta-rights provided by the ‘280 Patent specification, describing meta-rights as an extension of another kind of

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right, *i.e.*, the usage right, and tying the benefit of meta-rights in the distribution chain to their status as a “right to issue rights,” confirm the broadest reasonable construction of the term meta-rights in the context of the ‘280 Patent specification: “a right about a right.” (GOOG-1014, ¶ 31.)

B. Right(s)

“Rights” is a broad term. It’s plain and ordinary meaning is “something to which one has a just claim: as the interest that one has in a piece of property . . . the property interest possessed under law or custom and agreement in an intangible thing especially of a literary and artistic nature <film rights of the novel> .” (GOOG-1019.)

“Right(s)” is not explicitly defined by the specification of the ‘280 Patent or the ‘012 Patent. In the Background section of the ‘280 Patent, the term is used interchangeably with “usage rights.” For example, in the Detailed Description of the ‘280 Patent, “rights” is used to describe the combination of both usage rights and meta-rights: “rights 44a can include usage rights, which specify a manner of use, and meta-rights, which permit other rights to be derived.” (*Id.*, 4:36-38.)

Given the broad meaning of the term “right(s)” and the varied manner in which it is utilized in the specification, the broadest reasonable construction of “right(s)” in the ‘280 Patent is “a usage right or a meta-right.” (GOOG-1014, ¶ 32.)

C. License

Challenged claims 11 and 22 use the term “license.” The term is not defined by the ‘280 Patent specification or by the incorporated portions of the ‘012 Patent specification. The broadest reasonable construction of the term license is “data embodying a grant of rights.”

The specification of the ‘280 Patent supports this broadest reasonable construction. It describes a license as a granting of rights such as “usage rights” and “meta-rights” (described below) that allow a user to utilize and/or consume digital content in various ways:

licenses embody the actual granting of usage rights to an end user. For example, rights label 40 may include usage rights permitting a recipient to view content for a fee of five dollars and view and print content for a fee of ten dollars. License 52 can be issued for the view right when the five dollar fee has been paid, for example. Client component 60 interprets and enforces the rights that have been specified in license 52

(*See* GOOG-1001, 4:7-14; 5:13-17; 8:27-31.) For these reasons, a license is “data embodying a grant of rights.” (GOOG-1014, ¶ 33.)

D. State variable

The specification of the ‘280 Patent provides no explicit meaning for “state variable.” The term “variable” is a well-known computer science term meaning: “a named unit of storage that can be changed to any of a set of specified values

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during execution of a program.” (GOOG-1020; GOOG-1014 at ¶ 34.) Consistent with this meaning, the specification describes a state variable tracking a dynamic, or changing, condition (state) of a right:

[s]tate variables track potentially dynamic states conditions. State variables are variables having values that represent status of rights, or other dynamic conditions. State variables can be tracked, by clearinghouse **90** or another device, based on identification mechanisms in license **52**. Further, the value of state variables can be used in a condition. For example, a usage right can be the right to print content **42** for and a condition can be that the usage right can be exercised three times. Each time the usage right is exercised, the value of the state variable is incremented. In this example, when the value of the state variable is three, the condition is no longer satisfied and content **42** cannot be printed. Another example of a state variable is time. A condition of license **52** may require that content **42** is printed within thirty days. A state variable can be used to track the expiration of thirty days. Further, the state of a right can be tracked as a collection of state variables. The collection of the change is the state of a usage right represents the usage history of that right.”

(GOOG-1001, 7:66-8:16.)

In view of the known meaning of “variable” and the description of state variables in the specification of the ‘280 Patent, the broadest reasonable construction for the term “state variable” is “a variable that tracks a changing condition of a right.” (GOOG-1014, ¶ 34.)

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Note that the '280 Patent specification twice makes reference to a “state variable identification.” (GOOG-1001, 12:37-38; 14:26.) Moreover, Figures 9 through 17 all make reference to a “state variable id,” while the only corresponding specification description utilizing the similar term “state variable identification” is with regard to element 1604 of Figure 16. (*Id.*, 14:27.) The specification does not make clear whether the noted figures are meant to refer to state variables or state variable identification. Moreover, it is not clear whether and how a “state variable” is different from a “state variable identification.” This ambiguity should be resolved in favor of the broadest reasonable construction proposed by Petitioner.

E. Repository

The text of the '280 Patent offers no definition for repository. The '280 Patent uses the word only three times in the specification. Two of those instances refer to the repository as a place where rights are stored. (*See* GOOG-1001, 9:18-22; 9:43-46.) However, in the third instance of its use, the '280 Patent incorporates by reference the '012 Patent's discussion of repository: “U.S. Pat. No. 5,634,012, the disclosure of which is incorporated herein by reference, discloses a system for controlling the distribution of digital documents. Each rendering device has a repository associated therewith.” (*Id.*, 2:9-12.) Thus, the meaning of repository

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provided by the '012 Patent controls the meaning of the term in the '280 Patent. 37 C.F.R. 1.57(b)(1); *In re Lund*, 376 F.2d 982, 989 (C.C.P.A. 1967). The '012 Patent provides an explicit definition 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.

(GOOG-1002, 53:23-27.) Further, in a series of *Inter Partes* Reviews (IPRs) brought against three ContentGuard patents sharing substantially the same specification as the '012 Patent, the Board construed “repository” more narrowly as “a trusted system which maintains physical, communications and behavioral integrity, and supports usage rights.” (E.g., GOOG-1021 at 10.) The Board further construed “physical integrity” to mean “preventing access to information by a non-trusted system.” (*id.* at 11); “communications integrity” to mean “only communicates with other devices that are able to present proof that they are trusted systems, e.g., by using security measures such as encryption, exchange of digital certificates, and nonces” (*id.* at 12) and “behavioral integrity” to mean: “requiring software to include a digital certificate in order to be installed in the repository.” (*Id.* at 13.)

While a given PTAB panel is not bound by decisions of other panels, the Board’s earlier construction of “repository” is certainly informative as to the

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broadest reasonable construction of the same term in the '280 Patent. In any event, as will be described, because “repository” is used in the '280 Patent in the same manner as the '012 Patent, its meaning is the same in both patents. Thus, for purposes of a 35 U.S.C. § 101 analysis, a repository is known prior art and for purposes of an anticipation and obviousness analysis, the claimed repository of the '280 Patent is disclosed by the prior art '012 Patent, regardless of the definition adopted by the Board in this proceeding. (GOOG-1014, ¶ 35.)

For the Board’s convenience, the following table summarizes the Petitioner’s proposed constructions:

Claim Term	Petitioner’s Proposed Construction
meta-right	a right about a right
right(s)	a usage right or a meta-right
license	Data embodying a grant of rights
state variable	a variable that tracks a changing condition of a right
repository	a trusted system which maintains physical, communications and behavioral integrity, and supports usage rights where “physical integrity” means preventing access to information by a non-trusted system, “communications integrity” means only communicates with other devices that are able to present proof that they are trusted systems, e.g., by using security measures such as encryption, exchange of digital certificates, and nonces and

Claim Term	Petitioner's Proposed Construction
	"behavioral integrity" means "requiring software to include a digital certificate in order to be installed in the repository."

VIII. FULL STATEMENT OF THE REASONS FOR RELIEF REQUESTED

A. The § 101 Grounds

1. [Ground 1] Claims 1, 5, 11, 12 and 22 of the '280 Patent are Invalid Under 35 U.S.C. § 101 as Being Directed to Non-Statutory Subject Matter

Claims that effectively preempt an abstract idea are ineligible for patent protection, even if they fall within one of the four subject-matter categories of 35 U.S.C. § 101. *See Alice Corp. v. CLS Bank Int'l*, 573 U.S. ___, 134 S. Ct. 2347 (2014); *Bilski v. Kappos*, 130 S. Ct. 3218, 3231 (2010); *Bancorp Services, L.L.C. v. Sun Life Assurance Co. of Canada (U.S.)*, 687 F.3d 1266, 1275 (Fed. Cir. 2012). The '280 Patent's challenged claims are unpatentable under 35 U.S.C. § 101 because they are not clearly directed to a statutory class of subject matter and do not recite significantly more than the abstract idea of providing a consumer rights to an item.

The challenged independent claims of the '280 Patent, claims 1 and 12, recite method and system elements "for transferring rights adapted to be associated with items from a rights supplier to a rights consumer." The original examiner

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found the inventive and novel feature of the independent claims to be “a meta-right specifying a right that can be created when the meta-right is exercised.” (GOOG-1022 at 2.) Not only could a human being use meta-rights associated with a digital content to create new rights, these actions are precisely what a content distributor or library perform when selling or loaning content. The only distinguishing characteristic between the claims and traditional licensing activities is the use of computers and the enforcement of rights by a repository. However, “the prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of the formula to a particular technological environment or adding insignificant postsolution activity.” *Bilski*, 103 S.Ct. at 3230 (internal quotations omitted). Here, the patentee seeks to circumvent this prohibition by containing its traditional licensing activity in a distribution chain to an electronic medium. Moreover, the use of “meta-rights” to allow users to create new rights simply repeats the traditional licensing practices for the same content. Thus, the challenged claims constitute ineligible subject matter under Section 101.

i. Patent-eligibility framework

A claim is patent eligible if the claim meets two requirements: (1) the claim must be one of four statutory classes set forth in 35 U.S.C. § 101, a process, machine, manufacture, or a composition of matter and (2) the claim must not fall within one of three exceptions, a law of nature, physical phenomena, or an abstract

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idea. *Bilski*, 130 S. Ct. at 3225. In *Mayo v. Prometheus*, the Supreme Court “set forth a framework for distinguishing patents that claim ... abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice Corp.*, 134 S. Ct. at 2355.

The *Mayo* framework outlined a two-step process for distinguishing abstract ideas from patent-eligible concepts. First, it must be determined whether the patent claims at issue are directed towards patent-ineligible concepts, like abstract ideas. *Mayo v. Prometheus*, 132 S. Ct. 1289, 1293-94 (2012). Second, if the patent claims are directed towards abstract ideas – like the idea of creating sublicenses for digital content claimed in the ‘280 Patent – the claims must recite additional language “sufficient to ensure that the patent in practice amounts to *significantly more* than a patent upon the ineligible concept itself” in order to be patent eligible. *Alice Corp.*, 134 S. Ct. at 2355; *Mayo*, 132 S. Ct. at 1293 (emphasis added). Simply limiting a claim to “a particular technological environment” or adding “insignificant postsolution activity” or “well-understood, routine, conventional activity” does not make an abstract idea eligible for patent protection. *Bilski*, 130 S. Ct. at 3230; *Mayo*, 132 S. Ct. at 1294. Instead, a patentee must include “other elements or a combination of elements, sometimes referred to as the ‘inventive concept,’” to overcome its attempt to claim an abstract idea. *Id.* at 1294; (GOOG-1029 at 10.).

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Claims that recite “significantly more” than an abstract idea typically are “tied to a particular machine or apparatus” or “transform a particular article into a different state or thing.” *Bilski*, 130 S. Ct. at 3221-27. However, implementing an abstract idea on a “wholly generic computer” is not sufficient as an additional feature to provide “practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.” *Alice*, 134 S. Ct. at 2358. Such additions of a computer or processor must be “integral to the claimed invention, facilitating the process in a way that a person making calculations or computations could not.” *Bancorp*, 687 F.3d at 1278 (Fed. Cir. 2012); (*see also* GOOG-1023 at 16, citing *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)) (invalidating as patent-ineligible claimed processes that “can be carried out in existing computers long in use, no new machinery being necessary,” or “can also be performed without a computer.”).

ii. The ‘280 Patent claims are directed to an unpatentable abstract idea

The first step of *Mayo*’s two-step process for distinguishing abstract ideas from patent-ineligible concepts requires determining if the patent claims are directed to a patent-ineligible abstract concept. The challenged claims of the ‘280 Patent recite steps and elements that implement the abstract idea of providing consumers with rights to an item, like a movie or a book. Importantly, the ‘280 Patent does not purport to disclose a new approach or method of licensing or sub-

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licensing of content. Instead, the alleged invention claims the idea of utilizing “meta-rights” associated with content to generate downstream rights to the content for consumers. This idea is accomplished through conventional computing means and could even be implemented using written agreements and traditional mail. In fact, the claimed method completes no task or transaction that could not be performed by a human being in a traditional licensing setting. Like the risk hedging in *Bilski*, the idea of granting and sharing rights to use content is an “economic practice long prevalent in our system of commerce.” *Bilski*, 130 S. Ct. at 3231. (GOOG-1014, ¶¶ 49, 50.)

Indeed, the steps and elements specified in the ‘280 Patent’s claims for obtaining rights including a meta-right, determining whether a consumer is entitled to the right specified in a meta-right, and exercising the meta-right to create the right specified by the meta-right are no different than the steps practiced in a basic video rental transaction. A conventional, brick-and-mortar video store will obtain movie videos from a movie studio or a movie distributor under a license that defines the permitted rights, including “meta-rights” (*i.e.*, rights to create sublicensing rights) for that content. The clerk at a video store is permitted to, and typically will, use the granted rights to provide the content to customers under a sublicense that defines the subset of rights that are applicable to the customer. For example, the video store’s sublicense may require that the customer return the

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content after two weeks and may prohibit the customer from making copies of the content. The customer will have agreed to abide by the terms of the sublicense, typically in order to create an account with the video store or upon paying the rental fee, and will be subject to penalties for any violation of those terms (*e.g.*, fees to be charged against a credit card on file for late return or loss of the content, revocation of the customer’s membership for copying of content). The ‘280 Patent claims do nothing more than suggest the use of general processors and electronic repositories to automate the steps of this basic transaction.

In this example, the movie studio, video store, the clerk and the customer perform every step of claims 1, 5 and 11, though they perform these steps manually rather than digitally.

Claim Element	Corresponding Action
1. A computer-implemented method for transferring rights adapted to be associated with items from a rights supplier to a rights consumer, the method comprising:	Video Store obtains a movie from Movie Studio and receives rights to sell or rent that movie to Customer subject to certain rights defined by Movie Studio.
[a] obtaining a set of rights	Movie Studio specifies, in a contract to Video

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<p>associated with an item, the set of rights including a meta-right specifying a right that can be created when the meta-right is exercised, wherein the meta-right is provided in digital form and is enforceable by a repository;</p>	<p>Store, that Video Store may only rent movies to customers for private use.</p>
<p>[b] determining, by a repository, whether the rights consumer is entitled to the right specified by the meta-right;</p>	<p>Customer decides to rent Movie A, which is a new release. Customer hands his membership card and Movie A to Clerk. Clerk will look up Customer's membership information and the rental price for Movie A. Clerk determines that Customer does not have any unpaid late fees and may rent Movie A upon payment of the rental fee. Clerk determines that Customer is entitled to take possession of Movie A for playing in a private home when Customer pays the rental fee.</p>

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<p>[c] and exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right,</p>	<p>Upon receiving the rental fee, Clerk will hand to the customer Movie A and a receipt specifying how Movie A may be used and that it must be returned by the end of the next day.</p>
<p>[d] wherein the created right includes at least one state variable based on the set of rights and used for determining a state of the created right.</p>	<p>Clerk notes in a transaction log that Customer must return Movie A by the end of the next day. Customer's receipt also indicates that Movie A must be returned by the end of the next day.</p>

Claim Element	Corresponding Action
<p>5. The method of claim 1, wherein the state variable is updated upon exercise of a right associated with the state variable.</p>	<p>Clerk will record the due date of Movie A in a log as the rental transaction is completed.</p>

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Claim Element	Corresponding Action
11. The method of claim 1, further comprising generating a license including the created right, if the rights consumer is entitled to the right specified by the meta-right.	As the rental transaction is completed, Clerk draws up a receipt including the terms and conditions of Customer's rights are printed. Specifically, the receipt will state that Customer may view Movie A for a private viewing and that Movie A must be returned by the end of the next day.

As shown below, the steps of challenged method claim 1 have parallel recitations to the elements of challenged apparatus claim 12. Bold lettering indicates identical language as between the claims:

Claim 1	Claim 12
1. A computer-implemented method for transferring rights adapted to be associated with items from a rights supplier to a rights consumer, the method comprising:	12. A system for transferring rights adapted to be associated with items from a rights supplier to a rights consumer, the system comprising:
obtaining a set of rights	means for obtaining a set of

<p>associated with an item, the set of rights including a meta-right specifying a right that can be created when the meta-right is exercised, wherein the meta-right is provided in digital form and is enforceable by a repository;</p>	<p>rights associated with an item, the set of rights including a meta-right specifying a right that can be created when the meta-right is exercised, wherein the meta-right is provided in digital form and is enforceable by a repository;</p>
<p>determining, by a repository, whether the rights consumer is entitled to the right specified by the meta-right; and</p>	<p>means for determining whether the rights consumer is entitled to the right specified by the meta-right; and</p>
<p>exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right,</p>	<p>means for exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right,</p>
<p>wherein the created right includes at least one state variable based on the set of rights and used for determining a state of the created</p>	<p>wherein the created right includes at least one state variable based on the set of rights and used for determining a state of the created</p>

right.	right.
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As is readily evident from the above table, claims 1 and 12 are essentially identical, save that claim 1 is directed to a method and claim 12 is directed to “means for” accomplishing the steps of the method of claim 1.

Challenged claim 12 thus adds no more to the abstract idea of transferring rights from a rights supplier to a rights consumer recited in method claim 1, and is therefore similarly directed to unpatentable subject matter. Dependent claims 11 and 22 also have parallel recitations and claim 22, like claim 11, adds nothing to the abstract concept.

One “clear” indicator that a claim is directed to “unpatentable mental processes” is where all of the claims’ steps “can be performed in the human mind, or by a human using a pen and paper.” *CyberSource Corp. v. Retail Decisions*, 654 F.3d 1366, 1372-73 (Fed. Cir. 2011) (“a method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101.”). As demonstrated above, the movie studio, video store, the clerk and the customer are capable of performing all of the steps recited in the challenged claims of the ‘280 Patent using only their minds and/or a pen and paper.

iii. The ‘280 Patent’s claims add nothing to the abstract idea except use of known and general purpose computers

The ‘280 Patent fails under step two of the *Mayo* framework because it does nothing more than attempt to limit the abstract idea of rights sharing and

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sublicensing to “a particular technological environment” by specifying the use of general “processors” and “repositories”. *Bilski*, 130 S. Ct. at 3230; *Mayo*, 132 S. Ct. at 1294.

This fatal flaw in the ‘280 Patent claims was pointed out by the examiner during prosecution, and was tacitly confirmed by Patent Owner in its amendment of the claims. The examiner rejected the ‘280 Patent’s pending claims under Section 101, citing old Supreme Court precedent, arguing that the claims were not tied to any particular machine and was, therefore, not a patent eligible process. Specifically, the examiner stated:

Based on Supreme Court precedent and recent Federal Circuit decisions, § 101 process must (1) be tied to another statutory class (such as particular apparatus) or (2) transform underlying subject matter (such as article or materials) to a different state or thing. If neither of these requirements is met by the claims(s), the method is not a patent eligible process under 35 U.S.C. § 101.

(GOOG-1024 at 6, citing *Diamond*, 450 U.S. at 184; *Parker v. Flook*, 437 U.S. 584, 588 n. 9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1976).) In response, the patentee amended the pending, and now challenged, claims 1 and 12, to overcome the Section 101 rejection, by simply adding reference to a generic computer component, “a

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repository,” and for claim 1, noted that the method was “computer-implemented,” as shown below by applicant’s amendments to independent claims 1 and 12:

<p>1. (Currently Amended) A <u>computer-implemented</u> method for transferring rights adapted to be associated with items from a rights supplier to a rights consumer, the method comprising:</p> <p>obtaining a set of rights associated with an item, the set of rights including meta-rights specifying derivable rights that can be derived from the meta-rights, <u>wherein the meta-rights are provided in digital form and are enforceable by a repository;</u></p> <p><u>determining, by a repository, whether the</u> rights consumer is entitled to the derivable rights specified by the meta-rights; and</p> <p>deriving at least one right from the</p>	<p>12. (Currently Amended) A system for transferring rights adapted to be associated with items from a rights supplier to a rights consumer, the system comprising:</p> <p>means for obtaining a set of rights associated with an item, the set of rights including meta-rights specifying derivable rights that can be derived from the meta-rights, <u>wherein the meta-rights are provided in digital form and are enforceable by a repository;</u></p> <p>means for determining whether the rights consumer is entitled to the derivable rights specified by the meta-rights; and</p> <p>means for deriving at least one right from</p>
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derivable rights, if the rights consumer is entitled to, the derivable rights specified by the meta-rights, wherein the derived right includes at least one state variable based on the set of rights and used for determining a state of the derived right.	the derivable rights, if the rights consumer is entitled to the derivable rights specified by the meta-rights, wherein the derived right includes at least one state variable based on the set of rights and used for determining a state of the derived right.
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(GOOG-1025 at 2-4.) According to the patentee, these amendments were made to overcome the 101 rejection. (*Id.* at 8.)

While the addition of known generic computer components, like a “computer implemented method” or “a repository,” to overcome the Examiner’s Section 101 rejection may have been sufficient when the amendments were submitted, it is insufficient under current precedent. *Bilski*, *Mayo* and *Alice* all were decided by the Supreme Court after applicant made its May 28, 2009 amendments to overcome the Section 101 rejection. The present case law rejects the then-common practice of adding elemental computer-related recitations to otherwise abstract claims to meet the requirements of Section 101. Moreover, since applicant submitted its amendments, the Federal Circuit has at least three times clarified that Section 101 cannot be satisfied by implementation via generic

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computer elements or processes. *See, e.g., Cybersource Corp.*, 654 F.3d at 1375 (“the incidental use of a computer . . . does not impose a sufficiently meaningful limit on the claim’s scope”); *see also Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1317-18 (Fed. Cir. 2012); *Bancorp*, 687 F.3d at 1279 (holding claims reciting, for example, “digital storage” are unpatentable because “[u]sing a computer to accelerate an ineligible mental process does not make that process patent-eligible.”). Here, a “repository,” which was well known in the prior art (*see supra* at 18), does no more than automate and accelerate implementation of the ineligible abstract idea of rights sharing and sublicensing. Just last month, the Federal Circuit, in holding claims Section 101 ineligible, confirmed that such generic computers are indispensable staples of contemporary life free for all to use and reserved exclusively to no one. (GOOG-1029 at 11.)

The claim amendments do no more than limit the claims to a “particular technological environment” and add “insignificant postsolution activity” to the claims. *Bilski* 103 S. Ct. at 3230. Prior to the claim amendment, the solution sought had already been achieved by the abstract idea of rights sharing; the additions of “repository” and “computer-implemented” were insignificant amendments included only to overcome a Section 101 rejection under dated caselaw. The addition of the “wholly generic computer” repository does not provide “practical assurance that the process is more than a drafting effort designed to monopolize the

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[abstract idea] itself.” *Alice*, 134 S. Ct. at 2358. The limitations are not meaningful, as most practical applications involving licensing today, especially licensing of digital media, would likely involve a “repository.” “[S]imply appending conventional steps, specified at a high level of generality,” is not enough to supply an “inventive concept.” *Mayo*, 132 S. Ct. at 1292. Implementing an abstract idea “on a physical machine, namely a computer, [i]s not a patentable application of that principle.” *Id.* at 1301. The ‘280 Patent claims amount to “nothing significantly more” than an instruction to apply the abstract idea of transferring rights that grant one or more users access to digital content using some specified, generic process. *Alice*, 134 S. Ct. at 2360. Under current precedent, this is not enough to transform the ‘280 Patent’s abstract idea into a patent-eligible invention.

The challenged dependent claims merely (a) update the claimed state variable, which, as noted *supra* at 31-33, is nothing more than a reference to a dynamic condition or (b) generate a license including the created right. Not a single one of the dependent claims (claims 5, 11 and 22) adds or limits the independent claims to any particular technological environment or provides any significant postsolution activity, let alone an environment or activity that would raise the limitations of the dependent claim out of the realm of mere abstract claiming. Claim 5 provides that the state variable “is updated upon exercise of a

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right.” Claims 11 and 22 provides that a license is generated “including the created right, if the rights consumer is entitled to the right specified by the meta-right.”

The dependent claims refer to the same general and well-known technology disclosed in the specification, such as state variables and licenses, to accomplish the same abstract idea of transferring rights as in the independent claim. (GOOG-1001, 7:43-45; 7:66-8:1; GOOG-1014, ¶¶ 51, 52.); *Bilski*, 103 S.Ct. at 3231 (dependent claims ineligible under Section 101 where independent claims attempt to patent the use of the abstract idea of hedging risk finding and dependent claims then merely instruct the use of well-known random analysis techniques to help establish some of the inputs into the equation). Like the challenged independent claims, the challenged dependent claims fail to transform the ‘280 Patent’s abstract idea into a patent-eligible invention.

iv. No further meaningful method or system elements beyond the abstract idea are claimed

The challenged claims cover only the abstract idea of defining and sharing usage rights to content through the use of licenses and sublicenses. The challenged claims present no meaningful limitation to the abstract idea. The challenged claims of the ‘280 Patent fail to include “other elements or a combination of elements, sometimes referred to as the ‘inventive concept,’” to avoid preempting all uses of the abstract notion of sharing rights. *Mayo*, 132 S. Ct. at 1294. “To be patent-eligible a claim reciting an abstract idea must add more than just insignificant,

conventional or routine steps to the idea lest the claim effectively cover the abstract idea.” (See GOOG-1005 at 31); cf. *Mayo*, 132 S. Ct. at 1298; (GOOG-1029 at 11-12) (holding claims’ invocation of the Internet not sufficient to save otherwise abstract claims).

Patent Owner may assert that a “repository” is more than a general purpose computer and that the recitation of that element raises the claimed notion of rights sharing above a mere abstraction. (GOOG-1001, 15:13-14; 15:58-59.) Yet, a repository is insignificant, conventional and routine and adds no meaningful inventive concept to the claim because a repository was “long in use” and not a new machine. (See GOOG-1025 at 13.) As noted *supra* at 18, a repository is fully and extensively disclosed and discussed in ‘012 Patent and was therefore known and not new. Moreover, a repository itself comprises simple computer components that are described in the most general terms by Figure 12 of the ‘012 Patent:

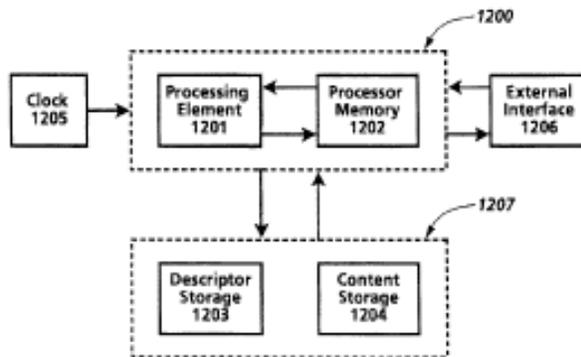


Fig.12

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The '012 Patent specification describes the known components of the repository of

Figure 12 as follows:

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 FIG. 12. Referring to FIG. 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.”

(GOOG-1002, 14:7-27.) Nothing in the above description of a repository rises to the level of an inventive concept. Secured housing, processing means, storage systems, clocks, external interfaces, processor elements, processor memory, transactions, decryption, decompression, microprocessors, ROM and RAM were

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all well known. (See GOOG-1014 at ¶¶ 53, 54.) These hardware elements and processes provide no practical application and are insignificant, routine, or conventional, implicit in any attempt to couch an abstract idea into a digital embodiment. Ancillary data-handling steps and apparatus provide no meaningful limitations to the abstract idea. See *Accenture Global Servs. v. Guidewire Software, Inc.*, 728 F.3d 1336, 1345 (Fed. Cir. 2013) (“the complexity of the implementing software or the level of detail in the specification does not transform a claim reciting only an abstract concept into a patent-eligible system or method.”) (GOOG-1014, ¶ 55.)

Moreover, the '280 Patent specification states that “[t]he invention can be implemented through **any type of device**[], such as computers and computer system.” (GOOG-1001, 14:50-53 (emphasis added).) Potential systems and devices include a client-server environment, single computer, dumb terminal, thin clients, personal computers, workstations, and PDAs. (*Id.*, 14:50-67.) Thus, nothing disclosed in the '280 Patent specification indicates that a repository is anything more than a collection of known general purpose computer components.

For these reasons, claims 1, 5, 11, 12 and 22 of the '280 Patent cover only an ineligible abstract idea applied to generic general purpose computer limitations. The claims are thus unpatentable under 35 U.S.C. §101.

B. [Ground 2] Claims 1, 5, 11, 12 and 22 Are Invalid Under 35 U.S.C. § 102 In View of the ‘012 Patent

1. The ‘012 Patent is Prior Art to the ‘280 Patent Under 35 U.S.C. § 102(a) and (b)

The earliest *possible* effective application date to which the ‘280 Patent could be entitled is June 7, 2001, which is the date of the filing of several provisional applications noted on the cover page of the ‘280 Patent. (*See* GOOG-1001, cover page.) The ‘280 Patent claims priority as a continuation-in-part to application No. 10/162,701 filed on June 6, 2002. (*Id.*)

The ‘012 Patent published May 27, 1997. Because the ‘012 Patent published more than four years before the earliest possible application date for the ‘280 Patent (June 7, 2001), the ‘012 Patent is prior art to the ‘280 Patent under at least 35 U.S.C. §§ 102(a) and (b) and AIA § 18(a)(1)(C). For clarity, Petitioner does not assert the ‘012 Patent in Grounds 2 and 3 as admitted prior art.

2. The Teaching of the ‘012 Patent

The ‘012 Patent seeks to solve the problem of “unauthorized and unaccounted distribution or usage of electronically published materials.” (*See* GOOG-1002, 1:30-32.) The ‘012 Patent attempts to solve this problem by attaching usage rights and using repositories to enforce the creation, usage and transfer of a digital work. (*See* GOOG-1002, 6:18-20; 6:30-49.) The ‘012 Patent describes methods and systems for attaching usage rights to digital content. (*See id.*, 6:50-55.) The usage rights are expressed as statements from a usage rights

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language that specify a manner of use and related conditions by which the digital work may be used. (*See id.*, 18:54-65.) The digital work and its related usage rights are stored in and passed among repositories which process the usage rights and control access to the works. (*See id.*, 18:54-63.) Usage rights may include a “Next-Set-of-Rights” in which usage rights are created and defined for a digital work after it is transported to another recipient repository in the distribution chain. (*See id.*, 11:32-41; 21:46-59; *see also* GOOG-1014 at ¶¶ 58, 59.)

The ‘012 Patent describes usage transactions. (GOOG-1002, 31:49-57; 31:62-33:59; 35:57-36:21; 36:22-51; 36:53-37:49.) These occur when a user of a repository requests the right to receive and use a digital work from a second repository in a certain way, *e.g.*, to Play or Print the digital work. The specification states that the repositories “know each other’s identities” and can therefore engage in a registration transaction to establish secure connectivity between each other. (*See* GOOG-1002, 28:42-44; 28:46-48; *see also* GOOG-1014, ¶ 60.)

After receiving a usage request, the second repository (server repository) checks whether it has been granted the right to transfer the digital work with the Play or Print right as requested by the first repository (requesting repository). (*See* GOOG-1002, 32:39-44.) If so, the server repository then checks other various conditions that must be met before providing the digital work. (*See id.*, 32:44-60.) Assuming those conditions are satisfied, the server repository then checks a Copy-

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Count condition, indicating the number of copies authorized by the usage rights to be loaned out at a time or viewed at a time. (*See id.*, 22:3-7; 32:61-65.) The server repository will only authorize requests for transfer to the requesting repository when the Copy-Count conforms to the number of Copies-in-Use for the transaction. (*See id.*, 32:66-33:6.) Specifically, the server repository checks a Copy-Count stored in the server repository to ensure that the Copy-Count is less than the Copies-in-Use before permitting the requested transaction. (*Id.*, 33:6-7; Step 1809; Figure 18.) A Copies-in-Use property, also stored in the server repository, is a counter of the number of copies of a work that are in use. (*Id.*, 10:51-53; 26:12-14; 32:66-33:4; 36:46-47; 37:12-13.) When confirmed, the server repository increments the Copies-in-Use by the number of digital works requested as part of the transaction and decrements the Copy Count. (*Id.*, 33:8-9; 26:12-14; 26:46-47; 37:11-13; Step 1801; Figure 18; *see also* GOOG-1014 at ¶¶ 61, 62.)

If the request is authorized, the digital work and the attached usage right, *e.g.*, Play or Print, is sent to the requesting repository. (*See* GOOG-1002, 33:45-47 and *see generally* descriptions of Copy, Transfer and Loan transactions at 35:56-37:50.) (GOOG-1014, ¶ 63.)

The '012 Patent provides a usage rights grammar element called “‘Next-Set-of-Rights:={(Add:Set-Of-Rights)}{(Delete: Set-Of-Rights)}{(Replace: Set-Of-Rights)}{(Keep: Set-Of-Rights)}’ [that] defines how rights are carried forward

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[i.e., transferred] for a copy of a digital work.” (GOOG-1002, 21:47-50; Fig. 15; Element 1509.) To this end, the ‘012 Patent provides three kinds of transfer rights called Copy, Transfer and Loan that can include a Next-Copy-Right designation that “determine the rights on the work after it is transported.” (*Id.*, 20:51-53; Fig. 15; Element 1505.) In fact, the ‘012 Patent explicitly states that if this Next-Copy-Right element is not specified, the rights for the next copy are the same as for the original. (*See id.*, 20:53-54; 21:50-52.) However, the usage rights can be modified as they are passed down a chain of repositories because rights can be added, deleted or replaced by the repositories as the works are received using the “Add”, “Delete” and “Replace” grammar elements. (*Id.*, 21:52-59; Fig. 15; Element 1509; *see also* GOOG-1014 at ¶ 64.)

Figure 15 of the ‘012 Patent defines the grammar for the usage rights, and the specification provides multiple examples of the use of the grammar to create sets of usage rights. (*See* GOOG-1002, 26:15-27:41.) One example is:

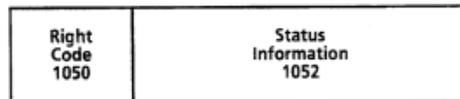
((Play) (Transfer) (Delete)(Loan 2 (Delete: Transfer Loan))

(*Id.*, 26:66-67.) Here, the server repository provides to a receiving repository a digital work and grants the receiving repository the right to Play, Transfer, Delete and Loan the digital work. (*Id.*, 27:1.) The receiving repository also receives a defined “Next-Copy-Rights” for the next copies of the works defining what rights the receiving repository may pass to a next repository. Here, the receiving

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repository receives the rights to Loan two (2) copies of the work. (*Id.*, 27:2.) The “Next-Set-of-Rights” for these loaned copies do not include the right to Transfer or Loan because those are explicitly excluded by the “Delete” element of the statement: “(Delete: Transfer Loan)”. (*Id.*, 27:2-28:3.) However, the receiving repository may provide the other rights it received (Play and Delete) with the loaned copy because those rights are not explicitly excluded. (*Id.*, 20:53-54; 21:50-52; 27:2-28:3.) Once the two copies are loaned out by the receiving repository, the receiving repository will have no rights over the work, *e.g.*, Play or Delete. (*Id.*, 27:4-5.) The receiving repository maintains the Copy-Count (initially set with a value of 2) and the Copies-in-Use property to limit the number of copies loaned to two. (GOOG-1014, ¶¶ 65, 66.)

The “status information field 1002” maintains the Copy-Count as part of a rights portion of a description block for the digital work as illustrated in Figure 10:



The status information field includes information about the state of a right of a digital work as described in Table 1. (*See* GOOG-1002, 10:29-32⁵.) Pertinent to the

⁵ Patentee mislabeled the status information field as “1052” in the drawing of Figure 10.

above-described example, such information further includes the above-noted Copies-in-Use property which references a counter of the number of copies of a work that are in use. It is incremented when another copy is used, decremented when use is completed. (*See id.*, 10:51-53; 26:12-14; 36:46-47; 37:12-13.) Thus, the Copies-in-Use property is incremented whenever the above work is loaned out and when two works are loaned out, no further transfers will be permitted. (*See id.*, 10:52-53.)

3. Every element of the challenged claims of the ‘280 Patent is anticipated or rendered obvious by the ‘012 Patent

The ‘012 Patent renders every challenged claim of the ‘280 Patent anticipated or obvious. As fully explained below, the ‘012 Patent teaches the use of “meta-rights” in the form of a “Next-Set-of-Rights.” The Next-Set-of-Rights allows a recipient repository to receive a right about a right. In this case, the Next-Set-of-Rights provides a right that allows the recipient repository to itself create a right that can be sent to another repository. The ’012 Patent also teaches the use of state variables, like Copies-in-Use. This state variable references the portion of the Rights Portion 704 holding status information where the Copies-in-Use is incremented as copies are sent to other repositories. The state variables can be based on the usage and meta-rights to the digital work. For example, the same Copies-in-Use for a Loan meta-right will be updated as different recipients of the Play right derived from the Loan receive a digital work. (GOOG-1014 at ¶ 67.)

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Further, the ‘012 Patent addressed the very challenges that the ‘280 Patent identifies as the problems to be solved. The ‘280 Patent says of the prior art that “[o]nce the publisher . . . provides content to the distributor, the publisher cannot readily control rights granted to downstream parties, such as the first or subsequent users.” (GOOG-1001, 2:35-37.) The Next-Set-of-Rights grammar element of the ‘012 Patent solves this problem by providing a way for a content distributor to specify rights that a recipient repository can create and then send to another repository further down the chain. The ‘280 Patent says that another problem with the prior art is that “parties do not have control over downstream parties unless they are privy to any transaction with the downstream parties in some way.” (GOOG-1001, 2:32-34.) The ‘280 Patent says that the prior art “concept of simply granting rights to others that are a subset of possessed rights is not adequate for multi-party, i.e., multi-tier, distribution models.” (*Id.*, 2:45-48.) The ‘012 Patent’s Next-Set-of-Rights grammar element allows an owner to control downstream distribution and is operable in a multi-tier distribution model. (GOOG-1014 at ¶ 68.)

C. [Ground 2] Element-By-Element Anticipation Analysis

1. Claim 1, Preamble, “A computer-implemented method for transferring rights adapted to be associated with items from a rights supplier to a rights consumer, the method comprising:”

The ‘012 Patent explicitly discloses that it relates to the field of usage rights enforcement for digital works meant to be distributed to a wide audience. (*See* GOOG-1002, 1:24-25; 4:4-11; 6:18-20.) It further describes itself as a “system for controlling use and distribution of digital works.” (*Id.*, 6:18-19.) This system functions by attaching usage rights, which define “how [a] digital work may be used or distributed by a possessor,” to the digital work. (*Id.*, 4:4-8.) Rights are transferred with the digital work from one repository to another. (*See id.*, 6:61-7:4.) Thus, the ‘012 Patent describes a method for transferring rights, such as usage rights, that are attached to an item from a rights supplier to a rights consumer. (*Id.*, 11:31-42.) (GOOG-1014 at ¶ 69.)

2. Claim 1, Element A, “obtaining a set of rights associated with an item, the set of rights including a meta-right specifying a right that can be created when the meta-right is exercised, wherein the meta-right is provided in digital form and is enforceable by a repository;”

Under a broadest reasonable construction of the term “rights” as “something to which one has a claim and may include a usage right or a meta-right,” a set of rights associated with an item is obtained, for example, when the creator of a work “attaches [usage rights] to the digital work, and store[s] them in [a repository].” (GOOG-1002, 7:5-37; 35:57-37:49.) An example of a set of rights is the exemplary

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right set ((Play) (Transfer) (Delete) (Loan 2 (Delete: Transfer Loan)) defined in accordance with the grammar of Figure 15 of the '012 Patent and discussed *supra* at 59-60; (GOOG-1002, 20:9-46; 21:47-59; 26:66-27:5; Fig. 15) The '012 Patent discloses additional examples at 26:15 through 27:41.

The usage rights assigned to a digital work by a creator or subsequent distributor of a digital work are attached to, and always remain with, the digital work. (See GOOG-1002, 6:50-55.) The usage rights of the '012 Patent “has a label (in the example above, Play, Transfer, Delete, Loan) which indicate the use or distribution privileges that are embodied by the right.” (*Id.*, 19:15-17.) It also “corresponds to a particular way in which a digital work may be used or distributed.” (*Id.*, 19:17-19; *see also* GOOG-1014 at ¶¶ 70, 71.)

A meta-right, *i.e.*, a right about a right, is included in the set of rights in the form of the grammar element “Next-Set-of-Rights,” which is “a category of rights involving the making of persistent, usable copies of the digital work on other repositories.” (GOOG-1002, 20:46-51; Fig. 15.) Like the meta-right of the '280 Patent, this “Next-Set-of-Rights” “determines the rights on the work after it has been transported. If this is not specified, then the rights on the transported copy are the same as on the original.” (*Id.*, 20:51-54.) In the example discussed above, the meta-right is “Loan,” which allows the repository that receives has that right to create Play and Delete usage rights for subsequent distribution. (*Id.*, 20:46-62;

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26:67-27:5; 36:54-37:49.) Thus, the ‘012 Patent discloses meta-rights that are attached to a digital work. (GOOG-1014 at ¶ 72.)

Moreover, the ‘012 Patent discloses meta-rights that are provided in digital form and enforceable by a repository. As described above, the ‘012 Patent’s usage rights are “interpreted by repositories and are used to determine what transactions can be successfully carried out for a digital work.” (GOOG-1002, 18:54-65; *see supra* VIII.B.2.) The very goal of the ‘012 Patent is “usage rights enforcement,” which is carried out by a repository. (*See* GOOG-1002, 1:24-25.) “The enforcement elements of the [‘012 Patent’s] invention are embodied in repositories.” (GOOG-1002, 6:56-61; 12:41-51; 14:62-15:19; *see also* GOOG-1014 at ¶ 73.)

3. Claim 1, Element B, “determining, by a repository, whether the rights consumer is entitled to the right specified by the meta-right;”

The ‘012 Patent discloses a repository determining whether the rights consumer is entitled to the right specified by the meta-right. For example, Figure 1 describes the basic operation of the ‘012 Patent’s “invention.” (*See* GOOG-1002, 7:5-7; Fig. 1.) When Repository 2 (requesting repository), *i.e.*, the rights consumer, requests access to a Digital Work from Repository 1 (server repository), “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.”

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(GOOG-1002, 7:23-26; *see also supra* VIII.B.2) (emphasis added). The '012 Patent describes the check as determining “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.**” (GOOG-1002, 7:27-29) (emphasis added). Examples of conditions are the number of copies allowed for a digital work, amount of time for a right to be exercised, the required securities levels are met and authorizations included, or payment of fees. (*See id.*, 22:7-17; 22:41-56; 32:34-33:9; 33:34-42.) (GOOG-1014 at ¶ 75.)

In a variation of the earlier example, Repository 1 may have the following usage rights to digital content:

**((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))))))**

(GOOG-1002, 27:15-33.) Repository 2 will request a loan under the first “Loan” right of the digital content from Repository 1. Repository 1 will check if access to the digital work may be granted by determining whether it has the “Loan” right

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and if all conditions have been satisfied, for example whether copies are available and fees are paid. (*See id.*, 7:23-29; *see also id.*, 32:7-33; 33:34-41.) Repository 2 must pay \$10 per day to Account-ID-567 to use the digital content under the first “Loan” right. (*See id.*, 27:15-33.) Repository 1 determines that Repository 2 is entitled to the digital content by determining that a fee is paid by Repository 2 through a billing transaction with the credit server. (*See id.*, 17:48-65; 31:2-47; *see also* GOOG-1014 at ¶¶ 74, 76.)

As a further example, the ‘012 Patent discloses that security and access conditions are checked to ensure the requesting repository is entitled to rights specified in the “Next-Set-Of-Rights” of Repository 1’s Loan right to the digital content. (*See* GOOG-1002, 32:52-65.) The security class specification specifies “a minimum security level for the repositories involved in the access.” (*Id.*, 23:41-42.) Similarly, the authorization specification specifies a “required authorizations on the same repository as the work.” (*Id.*, 23:43-48; 23:55-24:7; 32:61-65.) “In a transaction involving a repository and a document server, some usage rights may require that the repository have a particular authorization.” (*Id.*, 23:55-57.) In the example above, Repository 1 will check that the security and access conditions are satisfied if: 1) Repository 2 is at the specified security class, or a higher security class, 2) Repository 1 satisfies any specified authorization test and 3) Repository 2

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satisfies any specified authorization tests and has any required digital tickets. (*See id.*, 32:52-60.) (GOOG-1014 at ¶ 77.)

As described above, the '012 Patent discloses “determining, by a repository, whether the rights consumer is entitled to the right specified by the meta-right” because it discloses a repository determining that conditions, such as fee conditions or security and access conditions, are met. (GOOG-1014 at ¶ 78.)

4. **Claim 1, Element C, “and exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right, wherein the created right includes at least one state variable based on the set of rights and used for determining a state of the created right.”:**

In the '012 Patent, when a request is made by a requesting repository for a loan or copy of a digital work, the sending repository will perform a number of general tests to confirm that requirements imposed on a digital work are met. (*See* GOOG-1002, 32:22-24; *see supra* at VIII.C.3.) The sending repository will then exercise the meta-right by transmitting to the requesting repository a copy of the work with rights as specified by the “Next-Set-Of-Rights.” (*See* GOOG-1002, 21:47-59; 36:9-13; 36:38-41; 37:5-9.) The rights associated with the copy and specified by the “Next-Set-Of-Rights” are the created rights specified by the meta-right. (*Id.*, GOOG-1014 at ¶ 79.)

In the previously-described example of the meta-right ((Play) (Transfer) (Delete) (Loan 2 (Delete: Transfer Loan))), the Loan right allows a repository to

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create new rights, Play and Delete, when a Loan transaction is completed. The Copy Count and Copies-in-Use state variables are based on the set of rights and indicate the number of copies allowed and created, respectively, for the created right. (GOOG-1002, 26:67-27:5; GOOG-1014 at ¶ 80.)

The rights created from the Loan meta-right, like Play, reference the Copy-Count and Copies-in-Use state variables that themselves are set depending on the actions taken at the serving repository relating to the original Play right received from the first license. Thus, if the serving repository has made “copies” of the digital work by loaning the digital work, its Copy-Count and Copies-in-Use values will be changed and this affects the transactions performed by users of the created right. (GOOG-1002, 10:51-53; 22:3-17; 32:61-33:53; 37:12-13; Fig. 18; *see also* GOOG-1014 at ¶ 81.)

Similarly, the “Loan-Period,” “Loaner-Copy,” “Remaining-Time” and “History-list” state variables are based on the original set of rights and determine states of the created right. (GOOG-1002, 10:45-11:13; 36:54-37:49; GOOG-1014 at ¶ 82.) As discussed above at VIII.B.2, the “status information field [1052]” maintains the state as part of a rights portion of a description block for the digital work as illustrated in Figure 10:

Right Code 1050	Status Information 1052
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(GOOG-1014, at ¶ 83.)

5. Claim 5, “The method of claim 1, wherein the state variable is updated upon exercise of a right associated with the state variable.”

The “Copies-in-Use” and “Copy-Count” state variables specify the number of copies currently in use and the number of copies to which the repository has rights, respectively. (GOOG-1002, 10:51-53; 22:3-17; 32:61-33:9; 33:51-53.) Both state variables are associated with the loan and copy rights of a digital work. The number of “Copies-in-Use” would be updated each time a digital work is loaned or copied to another user. (*See* GOOG-1002, 33:6-10.) The “Copy-Count” for the copied or loaned digital work is set to the number of copies requested by a copy or loan transaction. (*See id.*, 36:12-14; 36:40-42; 37:12-13.) Similarly, the “Loan-Period,” “Loaner-Copy,” and “History-list” are updated when a digital work is copied or loaned to another person. (GOOG-1002, 10:54-56; 37:24-26; 37:37-38; 10:56-58; 11:9-11; GOOG-1014 at ¶¶ 84, 85.)

6. Claim 11, “The method of claim 1, further comprising generating a license including the created right, if the rights consumer is entitled to the right specified by the meta-right.”

Under a broadest reasonable construction of the term license as “data embodying a grant of rights,” a license is generated when a digital work is loaned,

copied or transferred. When a request is made by a requesting repository for a loan or copy of a digital work, the sending repository will perform a number of general tests to confirm that requirements imposed on a digital work are met. (*See* GOOG-1002, 32:22-24; *see supra* at VIII.C.3.) The sending repository will then transmit to the requesting repository a copy of the work with rights as specified by the “Next-Set-Of-Rights.” (GOOG-1002, 37:5-9; 26:7-12; 36:37-41.) The rights transmitted with the copy of the work as specified by the “Next-Set-Of-Rights” are the created rights of the generated license. (GOOG-1014 at ¶ 86.)

In the previously-described example (((Play) (Transfer) (Delete) (Loan 2 (Delete: Transfer Loan))), a license is generated from the Loan right. (GOOG-1002, 26:67-27:5.) The Loan right allows a repository to create new rights, Play and Delete, that can be passed to another repository. The created Play and Delete rights are included in the generated license. (GOOG-1014 at ¶¶ 87, 88.)

7. Claim 12, Preamble, “A system for transferring rights adapted to be associated with items from a rights supplier to a rights consumer, the system comprising:”

As discussed above for Claim 1 of the ’012 Patent discloses “a system for transferring rights adapted to be associated with items from a rights supplier to a rights consumer.” (*See supra* VIII.C.1; GOOG-1014 at ¶ 89.)

8. Claim 12, Element A, “means for obtaining a set of rights associated with an item, the set of rights including a meta-right specifying a right that can be created when the meta-right is

exercised, wherein the meta-right is provided in digital form and is enforceable by a repository;”

As discussed above for Claim 1, Element A, the '012 Patent discloses “obtaining a set of rights associated with an item, the set of rights including a meta-right specifying a right that can be created when the meta-right is exercised, wherein the meta-right is provided in digital form and is enforceable by a repository.” The '012 Patent also discloses that a “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.” (GOOG-1002, 14:15-22 and *generally* 14:1-15:19; *see also* GOOG-1014 at ¶ 90.)

9. Claim 12, Element B, “means for determining whether the rights consumer is entitled to the right specified by the meta-right; and”

As discussed above for Claim 1, Element B, the '012 Patent discloses “determining whether the rights consumer is entitled to the right specified by the meta-right.” The '012 Patent further discloses a “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

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performed by the processing means 1200. The processor element 1201 may be a microprocessor or other suitable computing component.” (GOOG-1002, 14:15-22, and *generally* 14:1-15:19; GOOG-1014 at ¶ 91.)

- 10. Claim 12, Element C, “means for exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right, wherein the created right includes at least one state variable based on the set of rights and used for determining a state of the created right.”**

As discussed above for Claim 1, Element C, the '012 Patent discloses “exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right, wherein the created right includes at least one state variable based on the set of rights and used for determining a state of the created right.” The '012 Patent also discloses a “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.” (GOOG-1002, 14:15-22, and *generally* 14:1-15:19; GOOG-1014 at ¶¶ 92, 93.)

11. Claim 22, “The system of claim 12, further comprising means for generating a license including the created right, if the rights consumer is entitled to the right specified by the meta-right.”

As discussed above for Claim 11, the '012 Patent discloses “generating a license including the created right, if the rights consumer is entitled to the right specified by the meta-right.” The '012 Patent also discloses a “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.” (GOOG-1002, 14:15-22, and *generally* 14:1-15:19; GOOG-1014 at ¶ 94.)

D. [Ground 3] Claims 1, 5, 11, 12 and 22 Are Invalid Under 35 U.S.C. § 103 in View of the '012 Patent and the Knowledge of a Person of Ordinary Skill in the Art

As reiterated by the Supreme Court in *KSR*, the framework for the objective analysis for determining obviousness under 35 U.S.C. § 103 is stated in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). Obviousness is a question of law based on underlying factual inquiries. The factual inquiries enunciated by the Court are: (1) determining the scope and content of the prior art; (2) ascertaining the differences between the claimed invention and the prior art and (3) resolving the level of ordinary skill in the pertinent art.

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The key to finding that a challenged claim is obvious under 35 U.S.C. § 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. § 103 should be made explicit. The Court, quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006), stated that “[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR*, 550 U.S. at 418. Significantly, moreover, the obviousness inquiry “not only permits, but requires, consideration of common knowledge and common sense.” *DyStar Textilfarben GmbH & Co. v. C.H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006); *see KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007) (eschewing “[r]igid preventative rules that deny factfinders recourse to common sense”).

To the extent that Patent Owner argues, and the Board agrees, that a meta-right must be exercisable and/or transferable without simultaneously copying or transferring the digital work with which the meta-right is associated, it would have been obvious to one of ordinary skill in the art to permit the exercise and/or transfer of the “Next-Set-Of-Rights” of the ‘012 Patent separately from any copying or transferring of the underlying digital work. A person of ordinary skill in the art would understand that there are finite, identified, and predictable solutions

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for creating, exercising and transferring meta-rights and associated digital works, with a reasonable expectation of success: 1) create, exercise and/or transfer a meta-right at the same time that the underlying digital work is copied or transferred , or 2) create, exercise and/or transfer a meta-right at a different time, or in a different action, from the copying or transfer of the underlying digital work. The implementation of the meta-rights is performed, and the digital works are transferred, utilizing source code that facilitates the necessary actions in servers and over communication networks. The common sense and knowledge of one of ordinary skill in the art, experienced in digital data transfer and communications and able to write source code, would have informed that person that the code be written to require the meta-right transfer at the same time or a different time from copying or transfer of the underlying work. (GOOG-1014 at ¶¶ 96-99.)

IX. CONCLUSION

For the reasons above, Google requests that the Board institute CBM review of the '280 Patent.

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Attached are a Power of Attorney and copies of the references. The required fee is paid via deposit account authorization. The Office is authorized to charge fee deficiencies and credit overpayments to Deposit Account No. 500988. (Kaye Scholer LLP).

Respectfully submitted,

/Robert R. Laurenzi/
Robert R. Laurenzi
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KAYE SCHOLER LLP

Date: December 9, 2014

Google CBM Petition for U.S. Patent No. 7,774,280

CERTIFICATION OF SERVICE (37 C.F.R. §§ 42.6(e), 42.105(a))

The undersigned hereby certifies that the above-captioned “Petition for Covered Business Method Patent Review of U.S. Patent No. 7,774,280 under 35 U.S.C. § 321 and § 18 of the Leahy-Smith America Invents Act,” including its supporting evidence, was caused to be served in its entirety on December 9, 2014, upon the following parties:

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Respectfully submitted,

/Robert R. Laurenzi/
Robert R. Laurenzi

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC.,
Petitioner,

v.

CONTENTGUARD HOLDINGS, INC.,
Patent Owner.

Case CBM2015-00040
Patent 7,774,280 B2

Before MICHAEL R. ZECHER, BENJAMIN D. M. WOOD, and
GEORGIANNA W. BRADEN, *Administrative Patent Judges*.

ZECHER, *Administrative Patent Judge*.

DECISION

Institution of Covered Business Method Patent Review
35 U.S.C. § 324(a) and 37 C.F.R. § 42.208

I. INTRODUCTION

A. *Background*

Petitioner, Google Inc. (“Google”), filed a Petition (“Pet.”) requesting a review under the transitional program for covered business method patents of claims 1, 5, 11, 12, and 22 of U.S. Patent No. 7,774,280 B2 (“the ’280 patent,” Ex. 1001). Paper 1. Patent Owner, ContentGuard Holdings, Inc. (“ContentGuard”), timely filed a Preliminary Response (“Prelim. Resp.”). Paper 8.

We have jurisdiction under 35 U.S.C. § 324(a),¹ which provides that a covered business method patent review may not be instituted unless the information presented in the Petition demonstrates “that it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable.” Taking into account the arguments presented in ContentGuard’s Preliminary Response, we determine that the information presented in the Petition establishes that claims 1, 5, and 11 are more likely than not unpatentable under 35 U.S.C. §§ 102(b) and 103(a). We, however, determine that the information presented in the Petition does not establish that claims 12 and 22 are more likely than not unpatentable. Pursuant to 35

¹ See Section 18(a)(1) of the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284, 329 (2011) (“AIA”), which provides that the transitional program for covered business method patents will be regarded as a post-grant review under Chapter 32 of Title 35 of the United States Code, and will employ the standards and procedures of a post-grant review, subject to certain exceptions.

U.S.C. § 324 and § 18(a) of the AIA, we hereby institute a covered business method patent review only as to claims 1, 5, and 11 of the '280 patent.

B. Related Matters

The parties indicate that the '280 patent has been asserted in the following three district court cases: (1) *ContentGuard Holdings, Inc. v. Google Inc.*, No. 2:14-cv-00061-JRG-RSP (E.D. Tex); (2) *Google Inc. v. ContentGuard Holdings, Inc.*, No. 3:14-cv-00498-WHA (N.D. Cal.); and (3) *ContentGuard Holdings, Inc. v. Amazon.com Inc.*, No. 2:13-cv-01112-JRG (E.D. Tex.). Pet. 6–7; Paper 7, 1–2. In addition to this Petition, Google filed another Petition requesting a review under the transitional program for covered business method patents of a certain subset of claims in U.S. Patent No. 8,001,053 (Case CBM2015-00043). Pet. 7; Paper 7, 1.

C. Standing

Section 18 of the AIA governs the transitional program for covered business method patent reviews. Section 18(a)(1)(B) of the AIA limits such reviews to persons, or their privies, that have been sued or charged with infringement of a covered business method patent. Google asserts that, because it has been sued for infringement of the '280 patent, it has standing to file its Petition. Pet. 8 (citing Ex. 1004). Based on the record before us, we agree.

D. The '280 Patent

The '280 patent, titled “System and Method for Managing Transfer of Rights using Shared State Variables,” issued August 10, 2010, from U.S. Patent Application No. 10/956,121, filed on October 4, 2004. Ex. 1001, at

[54], [45], [21], [22]. The '280 patent is a continuation-in-part of U.S. Patent Application No. 10/162,701, filed on June 6, 2002. *Id.* at [63]. The '280 patent also claims priority to the following provisional applications: (1) U.S. Provisional Application No. 60/331,624, filed on November 20, 2001; (2) U.S. Provisional Application No. 60/331,623, filed on November 20, 2001; (3) U.S. Provisional Application No. 60/331,621, filed on November 20, 2001; (4) U.S. Provisional Application No. 60/296,113, filed June 7, 2001; (5) U.S. Provisional Application No. 60/296,117, filed on June 7, 2001; and (6) U.S. Provisional Application No. 60/296,118, filed on June 7, 2001. *Id.* at [60].

The '280 patent generally relates to a method and system for managing the transfer of rights associated with digital works using shared state variables. Ex. 1001, 1:18–20. According to the '280 patent, one of the most important issues impeding the widespread distribution of digital works is the current lack of ability to enforce the rights of content owners during the distribution and use of their digital works. *Id.* at 1:24–29. In particular, content owners do not have control over downstream parties unless they are privy to transactions with the downstream parties. *Id.* at 2:33–34. Moreover, the concept of content owners simply granting rights to others that are a subset of the possessed rights is not adequate for multi-tier distribution models. *Id.* at 2:45–48.

The '280 patent purportedly addresses these problems by providing a method and system for transferring rights associated with an item—presumably a digital work—from a supplier to a consumer. Ex. 1001, 2:52–

55. The consumer obtains a set of rights associated with the digital work, which includes meta-rights specifying rights that may be derived therefrom. *Id.* at 2:55–57. If the consumer is entitled to the rights derived from the meta-rights, the disclosed invention then derives at least one right from the meta-rights. *Id.* at 2:58–60. The rights that may be derived from the meta-rights include at least one state variable based on the set of rights, which, in turn, may be used to determine a state of the derived right. *Id.* at 2:62–64.

E. Illustrative Claims

Claims 1 and 12 are the only independent claims challenged in this proceeding. Claim 1 is directed to a method for transferring rights associated with an item from a rights supplier to a rights consumer, whereas claim 12 is directed to a system for performing the same. Claims 5 and 11 directly depend from independent claim 1; and claim 22 directly depends from independent claim 12. Independent claims 1 and 12 are illustrative of the challenged claims and are reproduced below:

1. A computer-implemented method for transferring rights adapted to be associated with items from a rights supplier to a rights consumer, the method comprising:

obtaining a set of rights associated with an item, the set of rights including a meta-right specifying a right that can be created when the meta-right is exercised, wherein the meta-right is provided in digital form and is enforceable by a repository;

determining, by a repository, whether the rights consumer is entitled to the right specified by the meta-right; and

exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right, wherein the created right includes

at least one state variable based on the set of rights and used for determining a state of the created right.

Ex. 1001, 15:7–22.

12. A system for transferring rights adapted to be associated with items from a rights supplier to a rights consumer, the system comprising:

means for obtaining a set of rights associated with an item, the set of rights including a meta-right specifying a right that can be created when the meta-right is exercised, wherein the meta-right is provided in digital form and is enforceable by a repository;

means for determining whether the rights consumer is entitled to the right specified by the meta-right; and

means for exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right, wherein the created right includes at least one state variable based on the set of rights and used for determining a state of the created right.

Id. at 15:52–67.

F. Covered Business Method Patent

Under § 18(a)(1)(E) of the AIA, we may institute a transitional review proceeding only for a patent that is a covered business method patent. A “covered business method patent” is a patent that “claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions.” AIA § 18(d)(1); *see* 37 C.F.R. § 42.301(a). For purposes of determining whether a patent is eligible for a covered business method

patent review, the focus is on the claims. *See* Transitional Program for Covered Business Method Patents—Definitions of Covered Business Method Patent and Technological Invention; Final Rule, 77 Fed. Reg. 48,734, 48,736 (Aug. 14, 2012). A patent need have only one claim directed to a covered business method to be eligible for review. *See id.*

1. Financial Product or Service

In promulgating rules for covered business method reviews, the United States Patent and Trademark Office (“Office”) considered the legislative intent and history behind the AIA’s definition of a “covered business method patent.” 77 Fed. Reg. at 48,735–36. The “legislative history explains that the definition of covered business method patent was drafted to encompass patents ‘claiming activities that are financial in nature, incidental to a financial activity or complementary to a financial activity.’” *Id.* at 48,735 (citing 157 CONG. REC. S5432 (daily ed. Sept. 8, 2011) (statement of Sen. Schumer)). The legislative history indicates that “‘financial product or service’ should be interpreted broadly.” *Id.*

Google contends that the challenged claims of the ’280 patent encompass embodiments that are, at the very least, incidental or complementary to a financial activity. Pet. 10. In particular, Google argues that the invention embodied in independent claims 1 and 12 is described using economic terms, such as the transfer of rights between a “supplier” and a “consumer.” *See id.* In addition, Google argues that these independent claims are directed toward “obtaining a set of rights” by a consumer, including “meta-rights” relating to an item such as a digital work.

Id. at 10–11 (citing Ex. 1001, 15:10–11, 15:55–56). Google then asserts that the specification of the '280 patent confirms the financial nature of a consumer acquiring a digital work from a supplier, as required by independent claims 1 and 12. *See id.* at 11–12 (citing Ex. 1001, 4:3–14, 4:39–53, 5:4–11, 5:35–37).

ContentGuard contends that Google has not met its burden of demonstrating that the '280 patent is a covered business method patent because the challenged claims, as a whole, do not recite processes or operations for a financial product or service. Prelim. Resp. 4–7. ContentGuard argues that, when the focus is on the challenged claims as a whole, it is clear that these claims are directed to computer security technology for creating, transferring, managing, and enforcing rights associated with digital works. *Id.* at 8. ContentGuard asserts that such technology has no particular connection to the financial services sector. *Id.* at 9, 13–16. ContentGuard further argues that the challenged claims are not directed to financial concepts that would qualify the '280 patent as a covered business method patent eligible for review. *Id.* at 10–12.

We are not persuaded by ContentGuard's arguments because they narrowly focus on whether the challenged claims explicitly recite financial products or services. As we explained previously, the definition of a covered business method patent should be interpreted broadly to encompass patents claiming activities that are *incidental* or *complementary* to a financial activity. 77 Fed. Reg. at 48,735. ContentGuard does not direct us to a statutory or regulatory provision, much less legislative history, which

would require a covered business method patent to recite explicitly a financial product or service.

Independent claim 1 of the '280 patent recites “[a] computer-implemented method for *transferring rights adapted to be associated with items from a rights supplier to a rights consumer.*” Ex. 1001, 15:7–9 (emphasis added). In our view, the transfer of rights associated with an item from a supplier to a consumer is an activity that, at the very least, is incidental or complementary to a financial activity.

Our determination in this regard is further supported by the description of the invention in the specification of the '280 patent. For example, the specification discloses that the transfer of rights associated with an item from a supplier to a consumer may require the payment of a fee and processing by a clearinghouse. *See, e.g.*, Ex. 1001, 4:3–14 (disclosing how a consumer is permitted to view the digital works it purchased for a fee of \$5 or, alternatively, view and print the digital content for a fee of \$10), 4:39–43 (disclosing how a right specified in a license may include payment of a fee), 5:4–11 (disclosing that, when a consumer wishes to obtain a digital work, the use may go through a series of steps, including paying a fee), 5:35–37 (disclosing the use of a clearinghouse to process payment transactions). These cited disclosures in the specification reinforce that the transfer of rights associated with an item from a supplier to a consumer is, at the very least, incidental or complementary to a financial activity. On this record, therefore, the recited transfer of rights associated with an item from a supplier to a consumer in independent claim 1 satisfies the “financial

product or service” component of the definition for a covered business method patent set forth in § 18(d)(1) of the AIA.

2. *Technological Invention*

The definition of a “covered business method patent” in §18(d)(1) of the AIA does not include patents for “technological inventions.” When determining whether a patent is for a technological invention, we consider the following: “[(1)] whether the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art; and [(2)] solves a technical problem using a technical solution.” 37 C.F.R.

§ 42.301(b). The following claim drafting techniques typically do not render a patent a “technological invention”:

(a) Mere recitation of known technologies, such as computer hardware, communication or computer networks, software, memory, computer-readable storage medium, scanners, display devices or databases, or specialized machines, such as an ATM or point of sale device.

(b) Reciting the use of known prior art technology to accomplish a process or method, even if that process or method is novel and non-obvious.

(c) Combining prior art structures to achieve the normal, expected, or predictable result of that combination.

Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,763–64 (Aug. 14, 2012).

Google contends that the claimed subject matter of independent claim 1, as a whole, does not recite a technological feature that is novel and unobvious. Pet. 16. To support its contention, Google argues that the specification of the ’280 patent discloses that the technology used to

accomplish the method steps recited in independent claim 1 is old and well known. *Id.* at 16–17 (citing Ex.1001, 3:15–16, 3:55–58, 6:27–31, 9:28–31, 14:50–67, Fig. 1). For instance, Google argues that, as evidenced by the asserted prior art, the claimed features such as a “repository” and “rights language” are old and well known. *Id.* at 18–19. Google then asserts that the method steps recited in independent claim 1, either taken individually or collectively, do not recite a novel way of processing or transmitting rights associated with an item from a supplier to a consumer. *See id.* at 19–20.

ContentGuard contends that the ’280 patent is for a technological invention because the challenged claims recite a number of novel and non-obvious technical features. Prelim. Resp. 16 (citing Ex. 1001, 15:6–22). ContentGuard argues that Google once again fails to address the challenged claims as a whole, particularly the concept of meta-rights as implemented in combination with a repository and specific types of state variables. *Id.* at 17–18. ContentGuard further argues that Google ignores that the claimed “repository”—whether prior art or not—presents a concept unique to the computer security environment. *Id.* at 20.

Based on our independent assessment of independent claim 1, the only feature recited in the body of the claim that resembles a technological feature is the claimed “repository.” The claimed “repository,” however, does not direct independent claim 1 to a technological invention because, as evidenced by the asserted prior art, this feature was not novel and unobvious as of the earliest effective filing date of the ’280 patent. In addition, regardless of whether the method steps of “obtaining,” “determining,” and

“exercising” recited in independent claim 1 impart a novel and non-obvious way of processing or transmitting rights associated with an item from a supplier to a consumer, this claim only uses known prior art technology—namely, the claimed “repository”—to accomplish this method. We, therefore, are persuaded by Google’s explanation that the claimed subject matter of independent claim 1, as a whole, does not recite a technological feature that is novel and unobvious over the prior art.

We need only assess whether one of the factors set forth 37 C.F.R. § 42.301(b) is deficient to determine whether independent claim 1 is not for a “technological invention.”² As such, the current situation does not require us to assess whether independent claim 1 solves a technical problem using a technical solution. On this record, because we are persuaded by Google’s explanation that independent claim 1, as a whole, does not recite a technological feature that is novel and unobvious over the prior art, we are satisfied that Google has met its burden of demonstrating that the ’280 patent is a covered business method patent eligible for review.

² Indeed the legislative history of the AIA supports this interpretation of the “technological invention” exception. *See, e.g.*, 157 Cong. Rec. S1364 (daily ed. Mar. 8, 2011) (Sen. Schumer stated the “‘technological invention’ exception *only* excludes those patents whose novelty turns on a technological innovation over the prior art *and* are concerned with a technical problem which is solved by a technical solution”) (emphases added).

G. Prior Art Relied Upon

Google relies upon the following prior art reference:

Stefik US 5,634,012 May 27, 1997 (Ex. 1002)

H. Asserted Grounds of Unpatentability

Google challenges claims 1, 5, 11, 12, and 22 of the '280 patent based on the asserted grounds of unpatentability (“grounds”) set forth in the table below.

Reference	Basis	Challenged Claims
	§ 101	1, 5, 11, 12, and 22
Stefik	§ 102(b)	1, 5, 11, 12, and 22
Stefik and the knowledge of one of ordinary skill in the art	§ 103(a)	1, 5, 11, 12, and 22

II. ANALYSIS

A. Claim Construction

In a covered business method patent review, we interpret claim terms in an unexpired patent according to the broadest reasonable interpretation in light of the specification of the patent in which it appears. 37 C.F.R. § 42.300(b). Under the broadest reasonable interpretation standard, and absent any special definitions, we give claim terms their ordinary and customary meaning, as would be understood by one of ordinary skill in the art, at the time of the invention. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definitions for claim terms must be set forth with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

Google proposes a construction for each of the following claim terms: (1) “meta-right” (all challenged claims); (2) “rights” (all challenged claims); (3) “license” (claims 11 and 22); (4) “state variable” (all challenged claims); and (5) “repository” (all challenged claims). Pet. 27–36. In response, ContentGuard proposes an alternative construction for the following claim terms: (1) “meta-right” (all challenged claims); (2) “usage rights” (no challenged claims); (3) “rights” (all challenged claims); (4) “license” (claims 11 and 22); (5) “state variable” (all challenged claims); and (6) “repository” (all challenged claims). Prelim. Resp. 30–38.

The parties generally agree on the constructions offered for the claim terms “rights” and “license.” *Compare* Pet. 30–31, *with* Prelim Resp. 33–34. ContentGuard also admits that the claim term “usage rights” is not recited explicitly in the challenged claims of the ’280 patent. Prelim. Resp. 32. For purposes of this decision, we need not assess these claim terms further. We need only assess the constructions offered by the parties for the claim terms “meta-rights,” “state variable,” and “repository.” *See, e.g., Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (only those terms that are in controversy need to be construed, and only to the extent necessary to resolve the controversy).

In addition, we note that independent claim 12 recites the following three means-plus-function limitations: (1) “means for obtaining”; (2) “means for determining”; and (3) “means for exercising.” Dependent claim 22 also recites a means-plus-function limitation—namely, “means for generating.” Google does not identify specific portions of the specification

of the '280 patent that describe the structure corresponding to each recited function, as required by 37 C.F.R. § 42.204(b)(3). We also will address these means-plus-functions limitations recited in independent claim 12 and dependent claim 22 below.

1. “meta-rights” (all challenged claims)

Google contends that the broadest reasonable construction of the claim term “meta-right” is “a right about a right.” Pet. 27. To support its proposed construction, Google directs us to various portions of the specification of the '280 patent, the supporting Declaration of Benjamin Goldberg, Ph.D., the definition of “meta” in a general purpose dictionary, and the special definition of “usage rights” in Stefik, which is incorporated by reference in the '280 patent. *Id.* at 27–30 (citing Ex. 1001, 2:9–16, 2:63–67, 4:8–10, 5:49–67, 6:1–10; Ex. 1014 ¶ 31; Ex. 1002, 51:43–47, 53:48–51; Ex. 1018).

In response, ContentGuard contends that “meta-right” should be construed as “a right that, when exercised, creates or disposes of usage rights (or other meta-rights) but that is not itself a usage right because exercising a meta-right does not result in action to content.” Prelim. Resp. 30. To support its proposed construction, ContentGuard directs us to various portions of the specification of the '280 patent and a district court’s construction of the claim term “meta-right.” *Id.* at 30–32 (citing Ex. 1001, 5:52–60, 7:24–31, Figs. 9–16; Ex. 2001, 102–06). ContentGuard argues that Google’s proposed construction of “meta-right” in this proceeding is contrary to its proposed construction in the related district case where

Google purportedly endorsed the district court’s ruling that a meta-right “is not itself a usage right.” *Id.* at 31 (citing Ex. 2001, 1006).

Upon reviewing the specification of the ’280 patent, we note that it provides an explicit definition for the claim term “meta-rights.” In particular, the specification discloses that “[m]eta-rights are the rights that one has to generate, manipulate, modify, dispose of or otherwise derive other rights.” Ex. 1001, 5:47–49. By using the verb “are” following “meta-rights,” the specification sets forth an explicit definition for this claim term with reasonable clarity, deliberateness, and precision. *See Paulsen*, 30 F.3d at 1480. Although the construction proposed by Google is consistent with this explicit definition, we decline to adopt Google’s construction because it does not use the same terminology the specification uses to define explicitly the claim term “meta-right.”

We also decline to adopt ContentGuard’s proposed construction for the claim term “meta-right” for at least two reasons. First, it is well settled that our reviewing court disfavors any claim interpretation that renders a claim term or phrase superfluous. *Stumbo v. Eastman Outdoors, Inc.*, 508 F.3d 1358, 1362 (Fed. Cir. 2007). If we were to adopt the language in ContentGuard’s proposed construction of “when exercised, creates or disposes of usage rights (or other meta-rights),” it would render the claim phrase “a meta-right specifying a right than can be created when the meta-right is exercised,” explicitly recited in independent claims 1 and 12, superfluous.

Second, we decline to adopt ContentGuard’s proposed construction, particularly the language indicating that a meta-right “is not itself a usage right because exercising a meta-right does not result in action to content,” because it would import extraneous limitations into the claims. If a feature is not necessary to give meaning to what the inventor means by a claim term, it would be “extraneous” and should not be read into the claim. *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1249 (Fed. Cir. 1998); *E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 1433 (Fed. Cir. 1988). ContentGuard’s attempt to describe the claim term “meta-right” by distinguishing it from a usage right is not necessary to give meaning to this claim term, and should not be read into claims that recite this feature.

For purposes of this decision, we construe the claim term “meta-right” as “a right that one has to generate, manipulate, modify, dispose of or otherwise derive another right.”

2. “state variable” (all challenged claims)

Google contends that the specification of the ’280 patent does not provide an explicit definition for the claim term “state variable.” Pet. 31. Instead, Google asserts that the broadest reasonable interpretation of the claim term “state variable” is “a variable that tracks a changing condition of a right.” *Id.* at 32. To support its proposed construction, Google directs us to various portions of the specification of the ’280 patent, the definition of the term “variable” in a general purpose dictionary, and the supporting

Declaration of Dr. Goldberg. *Id.* (citing Ex. 1001, 7:66–8:16; Ex. 1020; Ex. 1014 ¶ 34).

In response, ContentGuard contends that Google’s construction of the claim term “state variable” does not reflect the broadest reasonable interpretation in light of the specification of the ’280 patent, because Google’s construction does not take into account that a state variable may represent the status of an item, usage rights, license, or other potentially dynamic conditions. Prelim. Resp. 34 (citing Ex. 1001, 7:66–8:1). Instead, ContentGuard argues that the broadest reasonable interpretation of the claim term “state variable” is “a variable having a value, or identifying a location at which a value is stored, that represents status of an item, rights, license, or other potentially dynamic conditions.” *Id.* at 35. To support its proposed construction, ContentGuard directs us to various portions of the specification of the ’280 patent and a district court’s construction of the claim term “state variable.” *Id.* at 34–35 (citing Ex. 1001, 7:66–8:1; 11:29–43, 12:19–21, Figs. 11, 17; Ex. 2001, 111, 114).

Contrary to Google’s assertion, we note that the specification of the ’280 patent does provide an explicit definition for the claim term “state variable.” In particular, the specification discloses that “[s]tate variables are variables having values that represent status of rights, or other dynamic conditions.” Ex. 1001, 7:67–8:1. By using the verb “are” following “state variables,” the specification sets forth an explicit definition for this claim term with reasonable clarity, deliberateness, and precision. *See Paulsen*, 30 F.3d at 1480. Although the construction proposed by ContentGuard

incorporates certain aspects of this explicit definition, we decline to adopt ContentGuard’s construction, in whole, because it also incorporates extraneous features, e.g., the language “a variable . . . identifying a location at which a value is stored,” that should not be read into the claims. *See Renishaw*, 158 F.3d at 1249.

For purposes of this decision, we construe the claim term “state variable” as “a variable having a value that represents status of rights, or other dynamic conditions.”

3. “*repository*” (*all challenged claims*)

Google contends that the specification of the ’280 patent does not provide an explicit definition for the claim term “repository.” Pet. 33. Google, however, argues that the ’280 patent incorporates by reference Stefik, which provides an explicit definition for the claim term “repository.” *Id.* at 33–34 (citing Ex. 1001, 2:9–12; Ex. 1002, 53:23–27).

In addition, Google directs us to a series of *inter partes* reviews brought against three ContentGuard patents that share a similar disclosure with Stefik. Pet. 34. Google argues that the Board panel in those proceedings construed the term “repository” as “a trusted system which maintains physical, communications, and behavioral integrity, *and supports usage rights.*” *Id.* at 34 (citing Ex. 1021, 10) (emphasis added). Google also argues that the Board panel further defined “physical integrity” as “preventing access to information by a non-trusted system”; “communications integrity” as “only communicates with other devices that are able to present proof that they are trusted systems, e.g., by using security

measures such as encryption, exchange of digital certificates, and nonces”; and “behavioral integrity” as “requiring software to include a digital certificate in order to be installed in the repository.” *Id.* (citing Ex. 1021, 11–13). Google asserts that, although a Board panel is not bound by a decision from other Board panel, unless the decision has been designated as precedential, we should adopt this construction for the claim term “repository” as the broadest reasonable interpretation. *See id.* at 34–35.

With one exception, ContentGuard generally agrees with Google’s proposed construction for the claim term “repository,” including its definition of “physical integrity,” “communications integrity,” and “behavioral integrity.” Prelim. Resp. 35–38. ContentGuard argues that the claim term “repository” should be construed as “a trusted system *in that it* maintains physical, communications, and behavioral integrity *in the support of usage rights.*” *Id.* at 35 (emphases added). ContentGuard argues that the district court considered the Board’s construction of the claim term “repository” in the previous *inter partes* reviews involving the ContentGuard patents referenced above, but rejected the Board’s wording in favor of the words emphasized above. *Id.* at 35–36 (citing Ex. 2001, 13–15). ContentGuard then urges us to adopt the district court’s construction of the claim term “repository” in this proceeding. *Id.* at 36.

After reviewing the constructions offered by both parties, we discern little, if any, difference between a “repository” that is “a trusted system *which* maintains physical, communications, and behavioral integrity, *and supports usage rights,*” and one that is “a trusted system *in that it* maintains

physical, communications, and behavioral integrity *in the support of usage rights.*” Pet. 34; Prelim. Resp. 35 (emphases added). We agree with Google that, although we are not bound by a decision of another Board panel, unless it is designated as precedential, the Board panel’s construction of the claim term “repository” in three previous *inter partes* reviews, brought against ContentGuard patents that share a similar disclosure with the Stefik reference incorporated by reference in the ’280 patent, is informative. We give more weight to the Board panel’s construction of the claim term “repository” in those proceedings than the district court’s construction of the same claim term primarily because *inter partes* review proceedings and covered business method patent review proceedings both apply the broadest reasonable interpretation standard to claims of an unexpired patent. 37 C.F.R. § 42.100(b); 37 C.F.R. § 300(b).

For purposes of this proceeding, we construe the claim term “repository” as “a trusted system which maintains physical, communications, and behavioral integrity, and supports usage rights.” We further define “physical integrity” as “preventing access to information by a non-trusted system”; “communications integrity” as “only communicates with other devices that are able to present proof that they are trusted systems, e.g., by using security measures such as encryption, exchange of digital certificates, and nonces”; and “behavioral integrity” as “requiring software to include a digital certificate in order to be installed in the repository.”

4. *Means-Plus-Function Limitations (claims 12 and 22)*

Independent claim 12 recites, in relevant part, “means for obtaining,” “means for determining,” and “means for exercising.” Ex. 1001, 15:55, 60–65. Dependent claim 22 recites, in relevant part, “means for generating.” *Id.* at 16: 26–27. As an initial matter, these are means-plus-function limitations that presumptively are governed by 35 U.S.C. § 112 ¶ 6³ because they each use the term “means for,” the term “means for” is modified by functional language, and the term “means for” is not modified by sufficient structure recited in the claim to perform the recited function. *See Inventio AG v. ThyssenKrupp Elevator Americas Corp.*, 649 F.3d 1350, 1356 (Fed. Cir. 2011) (“The use of the term ‘means’ triggers a rebuttable presumption that § 112, ¶ 6 governs the construction of the claim term.”).

When construing a means-plus-function limitation under § 112 ¶ 6, we first must identify the claimed function, and then we look to the specification to identify the corresponding structure that actually performs the claimed function. *Med. Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1210 (Fed. Cir. 2003); *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1119 (Fed. Cir. 2002). The corresponding structure of a means-plus-function limitation, however, must be more than simply a general-purpose computer or microprocessor, to avoid

³ Section 4(c) of the AIA re-designated 35 U.S.C. § 112 ¶ 6 as 35 U.S.C. § 112(f). Because the ’280 patent has a filing date before September 16, 2012 (the effective date of AIA § 4(c)), we will refer to the pre-AIA version of 35 U.S.C. § 112.

impermissible functional claiming. *Aristocrat Techs. Austl. Pty Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008). That is, the specification must disclose “enough of an algorithm to provide the necessary structure under § 112, ¶ 6,” or a disclosure that can be expressed in any understandable terms, e.g., a mathematical formula, in prose, or as a flowchart. *Finisar Corp. v. The DirectTV Group*, 523 F.3d 1323, 1340 (Fed. Cir. 2008). If the specification fails to provide sufficient structure, the means-plus-function limitation is indefinite under 35 U.S.C. § 112 ¶ 2. *Aristocrat*, 521 F.3d at 1333.

In its Petition, Google does not identify the corresponding structure for the means-plus-function limitations recited in independent claim 12 and dependent claim 22, as required by 37 C.F.R. § 42.204(b)(3), nor does it attempt to rebut the presumption that § 112 ¶ 6 governs their construction. *See generally* Pet. 26–36, 71–74. If anything, the corresponding structure would be a special purpose computer programmed to perform a disclosed algorithm, unless certain narrow exceptions concerning generic computer functions apply. *See In re Katz*, 639 F.3d 1303, 1316 (Fed. Cir. 2011).

Given that Google does not identify the portions of the specification of the ’280 patent that describe the structure corresponding to each recited function, Google essentially has placed the burden on us to construe the means-plus-function limitations recited in independent claim 12 and dependent claim 22 of the ’280 patent *sua sponte*, and then apply the asserted prior art. It is Google, however, who bears the burden to provide constructions for these means-plus-function limitations so that it can

demonstrate that the asserted prior art renders independent claim 12 and dependent claim 22 of the '280 patent more likely than not unpatentable. We decline to shoulder Google's burden and, as a consequence, we will not attempt to construe the means-plus-function limitations recited in independent claim 12 and dependent claim 22 of the '280 patent.

B. § 101 Ground

Google contends that claims 1, 5, 11, 12, and 22 of the '280 patent are directed to patent-ineligible subject matter under § 101. Pet. 36–55. In particular, Google argues that the challenged claims are directed to an abstract idea, and there are no other features recited in these claims that would transform the patent-ineligible concept to a patent-eligible application. *Id.* at 39–52.

We begin our analysis with the principles of law that generally apply to a ground based on § 101, and then we turn to the arguments presented by the parties.

1. Principles of Law

A patent may be obtained for “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” 35 U.S.C. § 101. The Supreme Court has held that this statutory provision contains an important implicit exception: laws of nature, natural phenomena, and abstract ideas are not patentable. *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014); *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) (“Phenomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are

the basic tools of scientific and technological work.”). Notwithstanding that a law of nature or an abstract idea, by itself, is not patentable, the practical application of these concepts may be deserving of patent protection. *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293–94 (2012).

In *Alice*, the Supreme Court reaffirmed the framework set forth previously in *Mayo* “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice*, 134 S. Ct. at 2355. The first step in the analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If the claims are directed to a patent-ineligible concept, the second step in the analysis is to consider the elements of the claims “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 132 S. Ct. at 1298, 1297). In other words, the second step is to “search for an ‘inventive concept’—i.e., an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* (quoting *Mayo*, 132 S. Ct. at 1294) (brackets in original). The prohibition against patenting an abstract idea “cannot be circumvented by attempting to limit the use of the formula to a particular technological environment or adding insignificant post-solution activity.” *Bilski v. Kappos*, 561 U.S. 593, 610–11 (2010) (citation and internal quotation marks omitted).

1. Whether the Challenged Claims are Directed to an Abstract Idea

In the first step of our analysis, we determine whether the challenged claims are directed to a patent-ineligible concept, such as an abstract idea. *See Alice*, 134 S. Ct. at 2355. Google contends that the challenged claims recite steps and elements that implement the abstract idea of “providing consumers with rights to an item, such as a movie or book.” Pet. 39. Google asserts that, of particular importance in this case, is that the challenged claims do not purport to disclose a new approach or method of licensing or sub-licensing content. *Id.* at 39–40. Google argues that the claimed method and system of independent claims 1 and 12 do not complete a task or transaction that could not have been performed by a human being in a traditional licensing setting. *Id.* at 40. Google further argues that, similar to the risk hedging in *Bilski*, the idea of granting and sharing rights to use content is an “economic practice long prevalent in our system of commerce.” *Id.* (citing *Bilski*, 561 U.S. at 611).

In response, ContentGuard relies upon the United States Court of Appeals for the Federal Circuit’s decision in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014),⁴ to support its position

⁴ We note the Federal Circuit’s decision in *DDR Holding* was released on December 5, 2014, which was four days before Google filed its Petition in this proceeding on December 9, 2014. Presumably, Google was aware of the factors the Federal Circuit considered when determining that the invention at issue in *DDR Holdings* was a patent-eligible application, and yet chose not to address these factors in its Petition. In any event, Google could have requested additional briefing regarding the Federal Circuit’s

that the challenged claims are not directed to an abstract idea. Prelim. Resp. 44; *see also id.* at 47–48, 52–54 (comparing the factors discussed in *DDR Holdings* with the challenged claims of the '280 patent). Taking claim 1 as an example, ContentGuard argues that this claim specifies rights associated with an “item” of digital content, and includes “at least one usage right,” “at least one meta-right,” and a “repository” that enforces the “meta-rights” using certain specific security and rights enforcement “integrities.” *Id.* at 51. ContentGuard argues that these features collectively represent computer security concepts having no corollary outside the realm of computer security. *Id.* at 51–52.

We agree with ContentGuard that the invention embodied in the challenged claims of the '280 patent is similar to the invention determined to be a patent-eligible application in *DDR Holdings*. In *DDR Holdings*, the Federal Circuit determined that, although the patent claims at issue there involved conventional computers and the Internet, the claims addressed the problem of retaining website visitors who, if adhering to the routine, conventional functioning of Internet hyperlink protocol, would be transported instantly away from a hosts website after “clicking” on an advertisement and activating a hyperlink. *DDR Holdings*, 773 F.3d at 1257. The Federal Circuit held that “the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” *Id.*

decision in *DDR Holdings*, particularly after ContentGuard relied upon *DDR Holdings* in its Preliminary Response.

Google’s arguments that the challenged claims of the ’280 patent are directed to a patent-ineligible abstract idea are predicated on the notion that they recite a fundamental economic or longstanding commercial practice. Contrary to Google’s arguments, the challenged claims are not directed merely to “providing consumers with rights to an item, such as a movie or book,” nor can the features recited in the challenged claims be stripped away so that these claims simply are directed to a traditional approach or method of licensing or sub-licensing content. Indeed, the challenged claims require much more.

For instance, independent claims 1 and 12 require obtaining “rights associated with an item”—namely, a digital work—wherein the set of rights includes a “meta-right” specifying a “right” that may be created. Ex. 1001, 15:10–12, 15:55–57. These claims further require providing the “meta-right in digital form” and indicate that the “meta-right” is enforceable by a “repository,” which, based on our claim construction above, constitutes “a trusted system” that enforces the “meta-rights” using very specific computer security and rights enforcement “integrities.” *Id.* at 15:13–16, 15:15–61; *see supra* Section II(A)(3). In addition, these claims further require “at least one state variable” used to determine the state of the “right” created by the “meta-right.” Ex. 1001, 15:19–22, 15:64–67. By virtue of their dependency, each of challenged claims 5, 11, and 22 incorporate all the limitations of independent claims 1 and 12 discussed above.

Based on our independent assessment of these challenged claims, we agree with ContentGuard that these claims do not recite merely a

fundamental economic or longstanding commercial practice, but instead are directed to a particular way of creating and enforcing rights associated with digital works that is “necessarily rooted in computer technology” and “specifically arises in the realm of computer networks.” *See* Prelim. Resp. 44, 47, 53–54 (citing *DDR Holdings*, 773 F.3d at 1257). We also agree with ContentGuard that implementation of digital rights management required by the challenged claims, particularly through the use of the claimed “repository,” is specific enough such that it does not preempt all other ways of ensuring that an owner of a digital work can enforce the rights associated therewith. *See id.* at 53–54.

In view of the foregoing, we are not persuaded that Google has demonstrated that the challenged claims of the ’280 patent are directed to a patent-ineligible abstract idea.

*2. Whether the Challenged Claims Include Limitations
That Represent Inventive Concepts*

The second step in our analysis requires us to determine whether the challenged claims include an “inventive concept,” i.e., an element or combination of elements sufficient to ensure that the patent in practice amounts to significantly more than a patent on the abstract idea, itself. *Alice*, 134 S. Ct. at 2355. Because we are not persuaded that Google has demonstrated that the challenged claims of the ’280 patent are directed to a patent-ineligible abstract idea, we need not, and, therefore, do not, assess whether Google has demonstrated that these claims satisfy the second step in the § 101 analysis under *Alice*.

3. *Summary*

In summary, we determine that Google has not shown that it is more likely than not that claims 1, 5, 11, 12, and 22 are directed to patent-ineligible subject matter under § 101.

C. Anticipation by Stefik

Google contends that claims 1, 5, 11, 12, and 22 are anticipated under § 102(b) by Stefik. Pet. 56–74. In particular, Google explains how Stefik describes the claimed subject matter of each challenged claim, and relies upon the Declaration of Dr. Goldberg to support its positions. *Id.* (citing Ex. 1014 ¶¶ 58–94). We are persuaded by Google’s analysis and supporting evidence as to claims 1, 5, and 11, but we are not persuaded that Google has shown that claims 12 and 22 are more likely than not anticipated by Stefik because Google fails to account properly for the means-plus-functions limitations recited in these claims.

We begin our analysis with the principles of law that generally apply to a ground based on anticipation, followed by a brief discussion of Stefik, and then we turn to the arguments presented by the parties.

1. Principles of Law

To establish anticipation under § 102(b), “all of the elements and limitations of the claim must be shown in a single prior reference, arranged as in the claim.” *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383 (Fed. Cir. 2001). “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros., Inc. v. Union*

Oil Co. of California, 814 F.2d 628, 631 (Fed. Cir. 1987). We analyze this asserted ground based on anticipation with the principles stated above in mind.

2. *Stefik*

The invention disclosed in *Stefik* generally relates to distributing and enforcing usage rights for digital works. Ex. 1002, 1:24–25. A digital work refers to any work that has been reduced to a digital representation, including any audio, video, text, or multimedia work, and any accompanying interpreter, e.g., software, which may be required to recreate or render the content of the digital work. *Id.* at 6:35–37. Usage rights refer to rights granted to a recipient of a digital work that define the manner in which a digital work may be used and distributed. *Id.* at 4:6–8, 6:41–45. According to *Stefik*, objectives of the disclosed invention include the following: (1) providing the owner of a digital work the flexibility to distribute the digital work as desired; and (2) a distribution system that transports a means for billing with the digital work. *Id.* at 3:15–17, 3:65–67.

Stefik discloses permanently attaching usage rights to the digital work. Ex. 1002, 6:50–51. Copies of the digital work also will have the usage rights attached thereto. *Id.* at 6:51–52. Hence, any usage rights and associated fees assigned by the creator and subsequent distributor of the digital work always will remain with the digital work. *Id.* at 6:52–55. *Stefik* further discloses that repositories enforce the usage rights of digital works. *Id.* at 6:56–57. In particular, repositories store digital works, control access

to digital works, bill for access to digital works, and maintain the security and integrity of the digital works stored therein. *Id.* at 6:57–60.

Figure 1 of Stefik, reproduced below, illustrates the basic operations of the disclosed invention. Ex. 1002, 4:35–37, 7:5–7.

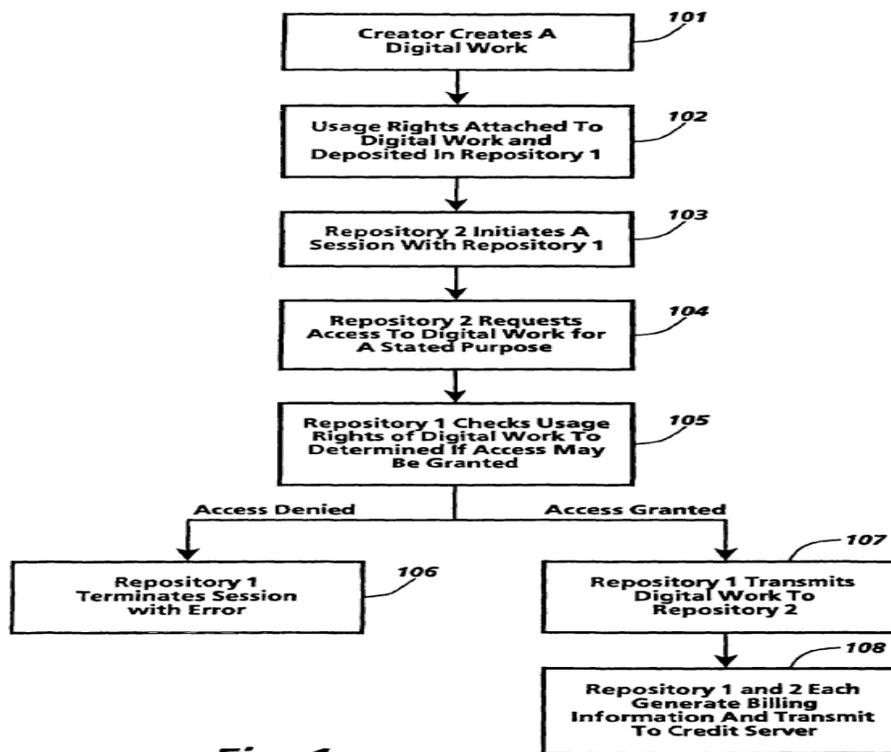


Fig. 1

As shown in step 101 of Figure 1, a creator creates a digital work. Ex. 1002, 7:7–8. At step 102, the creator determines the 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. *Id.* at 7:8–10. At step 103, repository 1 receives a request to access the digital work from repository 2. *Id.* at 7:15–16. Such a request, or session initiation, includes steps that help ensure that repository 1 and repository 2 are trustworthy. *Id.*

at 7:16–18. 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. *Id.* at 7:18–21. At step 105, repository 1 checks the usage rights associated with the digital work stored therein to determine if access to the digital work may be granted. Ex. 1002, 7:21–25. At step 106, if access is denied, repository 1 terminates the session with repository 2 by transmitting an error message. *Id.* at 7:29–30. At step 107, if access is granted, repository 1 transmits the digital work to repository 2. *Id.* at 7:30–32. At step 108, both repositories 1 and 2 generate billing information prior to transmitting the billing information to a credit server. *Id.* at 7:33–35. The use of both repositories 1 and 2 for billing prevents attempts to circumvent the billing process. *Id.* at 7:35–36.

Figure 15 of Stefik, the relevant portion of which is reproduced below, lists the usage rights grammar elements used by the disclosed invention. Ex. 1002, 5:10–11, 19:66–67.

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

This portion of Figure 15 illustrates grammar element 1509 “Next-Set-of-Rights,” which defines how rights are carried forward for a copy of a digital work. Ex. 1002, 21:47–50. If the Next-Copy-Rights are not specified, the rights for the next copy are same as those of the current copy. *Id.* at 21:50–52. Otherwise, the set of rights for the next copy may be specified. *Id.* at 21:52–53. Versions of rights after the “Add:” field may be added to the current set of rights, whereas version of rights after the “Delete:” field may

be deleted from the current set of rights. *Id.* at 21:52–55. Versions of rights after the “Replace:” field subsume all versions of rights of the same type in the current set of rights. *Id.* at 21:57–59.

3. Claims 1, 5, and 11

Google contends that Stefik describes all the limitations recited in independent claim 1. Pet. 65–70. In particular, based on its proposed construction of “meta-right” as “a right about a right,” Google argues that Stefik’s “Next-Set-of-Rights” amount to “a meta-right specifying a right that can be created when the meta-right is exercised,” as recited in independent claim 1. *Id.* at 64–65 (citing Ex. 1002, 20:46–62, 26:67–27, 36:54–37:49, Fig. 15). Google asserts that, similar to the claimed “meta-right,” Stefik’s “Next-Set-of-Rights” determines the rights associated with a copied digital work after it has been transported or, if no such rights are specified, ensures that the rights on the transported copy are the same as the original copy. *Id.* at 64 (citing Ex. 1002, 20:51–54).

Google further argues that Stefik’s disclosure of repository 1 determining whether repository 2 should be granted access to a digital work describes “determining, by a repository, whether the rights consumer is entitled to the right specified by the meta-right,” as recited in independent claim 1. Pet. 65–66 (citing Ex. 1002, 7:5–7, 7:23–29). Google argues that, before Stefik’s repository 1 transmits the digital work to repository 2, it performs a number of general tests to confirm that the requirements imposed on the digital work are met. *Id.* at 68 (citing Ex. 1002, 32:22–24). If those tests are met, Google argues that Stefik’s repository 1 exercises the meta-

right by transmitting a copy of the digital work with rights as specified by the “Next-Set-of-Rights” to repository 2. *Id.* at 68 (citing Ex. 1002, 21:47–59, 36:9–13, 36:38–41, 37:5–9). Based on these cited disclosures, Google asserts that Stefik describes “exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right,” as recited in independent claim 1. *See id.*

ContentGuard presents two arguments attacking Google’s position that Stefik anticipates all the limitations recited in independent claim 1. First, ContentGuard contends that Stefik’s “Next-Set-of-Rights” do not describe the claimed “meta-right” because the “Next-Set-of-Rights” are not actually rights, but instead define how rights are carried forward when one of the usage rights is exercised. Prelim. Resp. 71–72. In other words, ContentGuard argues that, rather than specify a new right that can be created when the meta-right is exercised, as required by independent claim 1, Stefik’s “Next-Set-of-Rights” pre-establish rights that must remain when a usage right, e.g., a loan, is exercised. *Id.* at 72 (emphasis omitted.).

We are not persuaded by ContentGuard’s argument because it is predicated on us adopting its construction of a “meta-right” as “a right that, when exercised, creates or disposes of usage rights (or other meta-rights) but that is not itself a usage right because exercising a meta-right does not result in action to content.” As we explained in the claim construction section, we did not adopt ContentGuard’s proposed construction for the claim term “meta-right.” *See supra* Section II(A)(1). Instead, for purposes of this decision, we construe the claim term “meta-right” as “a right that one has to

generate, manipulate, modify, dispose of or otherwise derive another right.”

Id. With this construction in mind, we are persuaded that Google has presented sufficient evidence to support a finding at this stage of the proceeding that Stefik’s “Next-Set-of-Rights” amount to “a meta-right specifying a right that can be created when the meta-right is exercised,” as recited in independent claim 1.

Second, ContentGuard contends that Stefik’s disclosure of repository 1 checking whether all conditions of the right are satisfied before permitting repository 2 to access the digital content associated therewith does not describe determining whether a rights consumer is entitled to “rights specified by the meta-right” before exercising the meta-right to create the right, as required by independent claim 1. Prelim. Resp. 73. ContentGuard argues that Stefik is silent with respect to a system checking whether a consumer is entitled to receive a right before creating the right. *Id.* at 73–74. Instead, ContentGuard asserts that Stefik teaches directly away from such an approach by disclosing that its “Next-Set-of-Rights” functions to automatically establish the rights for the receiving repository or repository 2. *Id.* at 74 (citing Ex. 1002, 11:52–55).

We understand ContentGuard to argue that Stefik teaches away from “determining, by a repository, whether the rights consumer is entitled to the right specified by the meta-right,” and “exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right,” as recited in independent claim 1. We are not persuaded by ContentGuard’s argument because Google’s asserted

ground of unpatentability is based on anticipation by Stefik. It is well settled that “[t]eaching away is irrelevant to anticipation.” *Seachange Int’l, Inc., v. C-Cor, Inc.*, 413 F.3d 1361, 1380 (Fed. Cir. 2005).

In any event, on this record, we are persuaded by Google’s position that Stefik’s repository 1 determines whether repository 2 should be granted access to a digital work and, if access is granted, repository 1 exercises the meta-right by transmitting a copy of the digital work with rights as specified by the “Next-Set-of-Rights” to repository 2. *See* Pet. 65–68 (citing Ex. 1002, 7:5–7, 7:23–29, 21:47–59, 32:22–24, 36:9–13, 36:38–41, 37:5–9). Based on these cited disclosures, Google has presented sufficient evidence to support a finding at this stage of the proceeding that Stefik describes “determining, by a repository, whether the rights consumer is entitled to the right specified by the meta-right,” and “exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right,” as recited in independent claim 1.

Based on the record before us, Google has demonstrated that independent claim 1 is more likely than not anticipated under 35 U.S.C. § 102(b) by Stefik. In addition, we are persuaded at this juncture in the proceeding that explanations and supporting evidence presented by Google sufficiently explain how Stefik describes the claimed subject matter of dependent claims 5 and 11. *See* Pet. 70–71. Therefore, on this record, Google also has demonstrated that dependent claims 5 and 11 are more likely than not anticipated under § 102(b) by Stefik.

4. *Claims 12 and 22*

Independent claim 12 recites, in relevant part, “means for obtaining,” “means for determining,” and “means for exercising.” Ex. 1001, 15:55, 60–65. Dependent claim 22 recites, in relevant part, “means for generating.” *Id.* at 16: 26–27. As we explained previously, these are means-plus-function limitations. Google does not identify sufficient structure corresponding to each recited function—namely, a microprocessor programmed to perform a specific algorithm—as required by our rules. That is, to the extent such an algorithm exists, Google has not “identif[ied] the specific portions of the specification that describe the structure . . . corresponding to each claimed function.” 37 C.F.R. § 42.204(b)(3). Moreover, because Google does not identify sufficient structure corresponding to each claimed function, Google has failed to specify where that structure is described in *Stefik*. *See* 37 C.F.R. § 42.204(b)(4) (“Where the grounds of unpatentability are based on prior art, the petition must specify where each element of the claim is found in the prior art.”). We, therefore, decline to institute a covered business method patent review as to claims 12 and 22 because the Petition is defective as to the means-plus-function limitations recited in these claims.

D. Obviousness Over Stefik and the Knowledge of One of Ordinary Skill in the Art

Google contends that claims 1, 5, 11, 12, and 22 are unpatentable under § 103(a) over the combination of *Stefik* and the knowledge of person of ordinary skill in the art. Pet. 74–76; *see also id.* at 63–74 (disclosing an element by element analysis of how *Stefik* teaches the claimed subject

matter of each challenged claim). In particular, Google explains how the proffered combination collectively teaches the claimed subject matter of each challenged claim, and relies upon the Declaration of Dr. Goldberg to support its positions. *Id.* (citing Ex. 1014 ¶¶ 69–98). We are persuaded by Google’s analysis and supporting evidence as to claims 1, 5, and 11, but we are not persuaded that Google has shown that claims 12 and 22 are more likely than not unpatentable over the proffered combination because Google fails to account properly for the means-plus-functions limitation recited in these claims.

We begin our analysis with the principles of law that generally apply to a ground based on obviousness, and then we turn to the arguments presented by the parties.

1. Principles of Law

A claim is unpatentable under § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). We analyze this

asserted ground based on obviousness with the principles identified above in mind.

2. *Claims 1, 5, and 11*

Google contends that Stefik teaches all the limitations recited in independent claim 1. *See* Pet. 63–70. Google then argues that, to the extent the challenged claims require that a meta-right must be exercisable or transferable without simultaneously copying or transferring the digital work associated therewith, it would have been obvious to one of ordinary skill in the art to permit the exercise or transfer of Stefik’s “Next-Set-of-Rights” separately from any copying or transferring of the underlying digital work. *Id.* at 75. Google further argues that a person of ordinary skill in the art would have understood that there are only two ways for exercising and transferring meta-rights and the digital works associated therewith: (1) at the same time; and (2) at a different time or, alternatively, in a different action. *Id.* at 75–76. Google asserts that one of ordinary skill in the art, who possesses experience in digital data transfer and communications, and who is able to write source code, would have been able to write code to require the meta-right transfer to occur at the same time or at a different time from copying or transfer of the underlying digital work. *Id.* at 76 (citing Ex. 1014 ¶¶ 96–99).

In response, ContentGuard contents that Google’s asserted ground based on obviousness does not address the limitations missing from Stefik that were discussed above in the context of Google’s asserted ground based on anticipation. Prelim. Resp. 76–78. As we explained previously, on this

record, we are persuaded that Google presents sufficient evidence to support a finding at this stage of the proceeding that Stefik describes these disputed limitations. Therefore, for essentially the same reasons discussed above, we are not persuaded by ContentGuard's arguments.

Next, ContentGuard contends that Google's suggestion to use the knowledge of one of ordinary skill in the art to modify Stefik (1) would not result in the subject matter of the challenged claims, (2) is based entirely on impermissible hindsight, (3) is conclusory in nature, and (4) is not supported by sufficient evidence. Prelim. 78–79. At this juncture, we are not persuaded by ContentGuard's arguments.

The Supreme Court has held that an obviousness evaluation “cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation, or by overemphasis on the importance of published articles and the explicit content of issued patents.” *KSR*, 550 U.S. at 419. Instead, the relevant inquiry is whether Google has set forth “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006), *cited with approval in KSR*, 550 U.S. at 418.

On the current record, we are persuaded that Google's rationale for combining the teachings of Stefik with knowledge of one of ordinary skill in the art suffices as an articulated reasoning with a rational underpinning to justify the legal conclusion of obviousness. In this case, even if the challenged claims require that a meta-right be exercisable or transferable without simultaneously copying or transferring the digital work associated

therewith, we credit the testimony of Google’s declarant, Dr. Goldberg, that one of ordinary skill would of had a reason to pursue known options within his or her technical grasp when contemplating ways to exercise the meta-right independently of the usage right(s) associated with the underlying digital work. *See* Pet. 75–76; Ex. 1014 ¶¶ 96–99; *see also* *KSR*, 550 U.S. at 421 (“When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp.”).

Based on the record before us, Google has demonstrated that independent claim 1 is more likely than not unpatentable under § 103(a) over the combination of Stefik and the knowledge of one ordinary skill in the art. In addition, we are persuaded at this juncture in the proceeding that the explanations and supporting evidence presented by Google sufficiently explain how the combination of Stefik and the knowledge of one ordinary skill in the art teach the claimed subject matter of dependent claims 5 and 11. *See* Pet. 70–71. Therefore, on this record, Google has demonstrated that dependent claims 5 and 11 are more likely than not unpatentable under § 103(a) over the combination of Stefik and the knowledge of one ordinary skill in the art.

3. Claims 12 and 22

As we explained previously, claims 12 and 22 recites means-plus-function limitations. With respect to these means-plus-function limitations, Google has failed to satisfy its burden of providing sufficient structure

corresponding to each recited function. *See* 37 C.F.R. § 42.204(b)(3). We, therefore, decline to institute a covered business method patent review as to claims 12 and 22 because the Petition is defective as to the means-plus-function limitations recited in these claims.

III. CONCLUSIONS

For the foregoing reasons, we determine that the information presented in the Petition establishes that claims 1, 5, and 11 of the '280 patent are more likely than not unpatentable under §§ 102(b) and 103(a). We, however, determine that the information presented in the Petition does not establish that claims 12 and 22 of the '280 patent are more likely than not unpatentable. At this stage of the proceeding, we have not made a final determination with respect to the patentability of the instituted claims.

IV. ORDER

Accordingly, it is:

ORDERED that pursuant to 35 U.S.C. § 324 and § 18(a) of the AIA, a covered business method patent review is hereby instituted only as to claims 1, 5, and 11 based on the following grounds:

- A. Claims 1, 5, and 11 as being anticipated under § 102(b) by Stefik;
and
- B. Claims 1, 5, and 11 as being unpatentable under § 103(a) over the combination of Stefik and the knowledge of one of ordinary skill in the art;

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FURTHER ORDERED that no other grounds asserted in the Petition are authorized for this covered business method patent review other than those specifically identified above; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 324(d) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial; the trial is commencing on the entry date of this decision.

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC. and APPLE INC.,
Petitioners

v.

CONTENTGUARD HOLDINGS, INC.
Patent Owner

Case CBM 2015-00040¹

U.S. Patent 7,774,280

Filed October 4, 2004

Issued August 10, 2010

Title: SYSTEM AND METHOD FOR MANAGING TRANSFER OF
RIGHTS USING SHARED STATE VARIABLES

Attorney Docket No. 20318-134361

Customer No: 22242

RESPONSE OF PATENT OWNER

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450

¹ Case CBM2015-00160 has been joined with this proceeding.

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I. INTRODUCTION

This proceeding commenced when Google, Inc. (“Google”) filed a Petition for Covered Business Method Review under the Leahy-Smith America Invents Act (“AIA”) regarding claims of United States Patent No. 7,774,280 (“the ‘280 patent”)(Paper 1.) Patent Owner, ContentGuard Holdings, Inc. (“CG”), timely filed a Preliminary Response. (Paper 8.) The Board entered its Decision on Institution on June 24, 2015, by which it denied certain asserted grounds of invalidity and ordered the institution of covered business method review of claims 1, 5 and 11 of the ‘280 patent pursuant to 35 U.S.C. § 324 and § 18(a) . (Paper 9.) Trial has been commenced on the following grounds:

- A. Claims 1, 5 and 11 as being anticipated under § 102(b) by U.S. Patent No. 5,634,012 to Stefik et al. (“Stefik”); and
- B. Claims 1, 5 and 11 as being unpatentable under § 103(a) over the combination of Stefik and the knowledge of one of ordinary skill in the art.

(*Id.* at 43.)

On September 11, 2015, the Board entered a Decision instituting covered business method patent review in response to a Petition filed by Apple Inc. in CBM2015-00160. The Decision instituted CBM review of the same claims based on the same grounds instituted in this proceeding. The Decision further ordered

that CBM2015-00160 be joined with this proceeding. (Paper 13.)

CG respectfully submits this Response in accordance with 35 U.S.C. § 326(a)(8) and 37 C.F.R. § 42.220, opposing the Petition and responding to the Decision as to the instituted grounds. The Response is supported by the declaration of CG's retained qualified technical expert, David M. Martin Jr., Ph.D. (Ex. 2009), as well as other accompanying exhibits.

Under § 18(a)(1)(E) of the AIA, the Board may institute a transitional review proceeding only for a patent that is a covered business method patent. AIA §18(d)(1) and 37 C.F.R. §42.301(a) define a covered business method patent as one "that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service" CG opposes the Petition and objects to the institution of trial in this proceeding because the '280 patent does not claim a system or method for performing data processing or other operations used in the practice, administration, or management of a financial product or service, and is thus not eligible for CBM patent review.

The definition of covered business method patent excludes patents for "technological inventions." AIA § 18(d)(1). The '280 claims provide a novel and nonobvious technical solution to problems associated with digital rights management ("DRM"). The Board should reconsider its initial determination and

dismiss this proceeding on the grounds that the '280 patent is not a covered business method patent eligible for review.

If the Board maintains that the '280 patent is eligible for CBM patent review, it should ultimately affirm the validity of claims 1, 5 and 11 over Stefik alone, and in combination with the knowledge of one of ordinary skill in the art. Google bears the burden of demonstrating by a preponderance of the evidence that the claims are invalid. 35 U.S.C. § 326(e). It has not carried its burden and could never do so.

Stefik is directed to usage rights, which are rights about digital content. Usage rights define the rights that one has to use an item of digital content and to further distribute it. The '280 patent claims are directed to meta-rights, which are rights about other rights. Meta-rights define the rights that one has to generate, manipulate, modify, dispose of or otherwise derive other rights. Exercising a usage right results in action to the associated digital content; whereas meta-rights are exercisable in a way that is independent of an action to content.

According to claims at issue, exercising a meta-right creates a new right. Stefik does not disclose, nor does it suggest, digital rights management involving meta-rights for creating new rights independent of the exercise of a usage right. The only rights involved in the DRM schemes disclosed in Stefik are usage rights, which are not meta-rights. There are other patentable distinctions between the

subject matter of claims 1, 5 and 11 and the digital rights management techniques disclosed in Stefik. The claims distinguish over Stefik under the claim construction applied in the Decision. Those differences are even more apparent under the broadest reasonable construction of “meta-right” advocated by CG, which correctly incorporates that a meta-right is not a usage right because exercising a meta-right does not result in action to content. Google’s anticipation challenge must therefore fail.

Google has also not shown that any of claims 1, 5 or 11 would have been obvious based on Stefik and the knowledge of persons skilled in the art. The Petition entirely lacks any persuasive fact-based analysis with some rational underpinning demonstrating obviousness.

The Board should therefore reconsider its initial Decision and dismiss the proceeding, holding that the ‘280 patent is not eligible for CBM patent review. If the proceeding is not dismissed on this jurisdictional basis, a final decision should be entered affirming the validity of the challenged claims.

II. OVERVIEW OF THE ‘280 PATENT

The ‘280 patent is drawn to specific technologies in the field of computer security, more specifically, in the area of digital rights management. (Ex. 2009 at ¶29.) Although the Internet has fundamentally altered the way in which digital content is accessed by consumers, from its earliest days there has been concern

about how owners of content could continue to protect the fruits of their labor. (*Id.*) Because the Internet was perceived as “a pirate’s paradise,” “the instant and practically costless copying and distribution the Net facilitates ha[d] made many creators, authors, and copyright-holders balk at digitizing and posting their ideas.” (Ex. 2002.)

In the early 1990s, a team at Xerox’s Palo Alto Research Center, led by Mark Stefik, obtained a number of patents for their digital rights management technologies, including the ‘012 patent asserted by Google against the ‘280 patent in this proceeding. (Ex. 2009 at ¶30.)

Stefik’s solution included introducing the concepts of repositories and usage rights into a system for content distribution. (*Id.* at ¶31.) “Usage rights” signifies rights granted to a recipient of a digital work, and defining how a digital work can be used and if it can be further distributed. (*Id.*) Each usage right may have one or more specified conditions, which must be satisfied before the right may be exercised. Stefik envisioned that the “repositories” would be trusted computer entities that embody enforcement elements in the system. (*Id.*) The repositories are trusted to fairly and reliably carry out transactions in the system. As such, the repositories are required to maintain three types of “integrities” – physical, communications, and behavioral – in support of the associated usage rights. (*Id.*)

Although the DRM architecture of the Stefik patent allowed the publisher of a digital work some control over the usage rights granted to downstream parties of a distribution chain, this aspect of Stefik’s DRM scheme had certain limitations. (*Id.* at ¶32.) For example, in the Stefik patent, the usage rights to be associated with a distributed copy of a digital work are specified parameters of the usage right (e.g., transfer, copy, loan) that is invoked to distribute the digital work. (*Id.*) Stefik does not disclose an optimal mechanism to control how distributors define usage rights for their customers independent of the transactions associated with exercising a usage right to transfer the content of the digital work. (*Id.*) In addition, only a few of the usage right transactions disclosed in Stefik permit associating usage rights with the distributed copy of the digital work that are broader than the rights of sender. (*Id.*)

The ‘280 patent builds on the innovations taught by Stefik in the ‘012 patent. (*Id.* at ¶33.) Recognizing that “business models for creating, distributing, and using digital content and other items involve a plurality of parties,” i.e., content creators, publishers, distributors, and end-users (Ex. 1001 at 2:24-26), and that parties residing upstream in the distribution chain may wish to exercise “control over downstream parties” (*id.* at 2:33-34), the inventors of the ‘280 patent developed digital rights management technologies based on “meta-rights . . . enforceable by a repository.” (*Id.* at Cl. 1, 15:13-14.) The ‘280 patent addresses constraints of prior

DRM systems in which “the publisher cannot readily control rights granted to downstream parties” and the schemes are limited by “the concept of simply granting rights to others that are a subset of possessed rights” (*Id.* at 2:34-39 and 45-48.)

“Meta-rights” are different in at least two significant respects from the “usage rights” taught in the prior Stefik patents. As the ‘280 patent teaches, the exercise of “usage rights” results in “actions to content.” (*Id.* at 7:26-27.) For example, usage rights can be for viewing, printing, or copying digital content. In contrast, the exercise of meta-rights results in new or altered rights: “When meta-rights are exercised, new rights are created from the meta-rights or existing rights are disposed as the result of exercising the meta-rights.” (*Id.* at 7:28-31.) Significantly, no “actions to content” result from the exercise of meta-rights.

The ‘280 patent expressly incorporates the prior Stefik ‘012 patent and its teachings concerning trusted repositories. (*Id.* at 1:40-42.) Each claim of the patent specifies that the meta-right is “enforceable by a repository,” and further requires a user entitlement determination step also performed by a repository.

Claim 1 of the ‘280 patent is directed to a computer-implemented method for transferring rights adapted to be associated with items from a rights supplier to a rights consumer, the method comprising:

obtaining a set of rights associated with an item, the set of rights including a meta-right specifying a right that can be created when the meta-right is exercised, wherein the meta-right is provided in digital form and is enforceable by a repository;

determining, by a repository, whether the rights consumer is entitled to the right specified by the meta-right; and

exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right, wherein the created right includes at least one state variable based on the set of rights and used for determining a state of the created right.

Dependent claim 5 recites “the method of claim 1, wherein the state variable is updated upon exercise of a right associated with the state variable.” Dependent claim 11 recites “the method of claim 1, further comprising generating a license including the created right, if the rights consumer is entitled to the right specified by the meta-right.” (*Id.* at Cl. 1, 5 and 11.)

The ‘280 patent confirms that usage rights define one or more permitted manners of use of digital content, such as viewing movies and e-books. (*Id.* at 2:14-19.) The patent specification states that “[m]eta-rights are the rights that one has to generate, manipulate, modify, dispose of or otherwise derive other rights.” (*Id.* at 5:47-49.) Both usage rights and meta-rights are enforced by repositories. As mentioned, a key difference between usage rights and meta-rights is the result from exercising the rights: When exercising usage rights, actions to content result. (*Id.* at

7:23-34.) For example, usage rights can be for viewing, printing, or copying digital content. In contrast, the exercise of meta-rights results in new or altered rights: “When meta-rights are exercised, new rights are created from the meta-rights or existing rights are disposed as the result of exercising the meta-rights.” (*Id.* at 7:28-31.) Claim 1 is specific to meta-rights that can create a new right when exercised.

For example, Figure 11 of the ‘280 patent and the accompanying description (*id.* at 12:39-56) describes a license embodying a meta-right (shown on the left as item 1101) that is exercised to create instances of a usage right for at least two users (shown on the right as items 1102 and 1103).

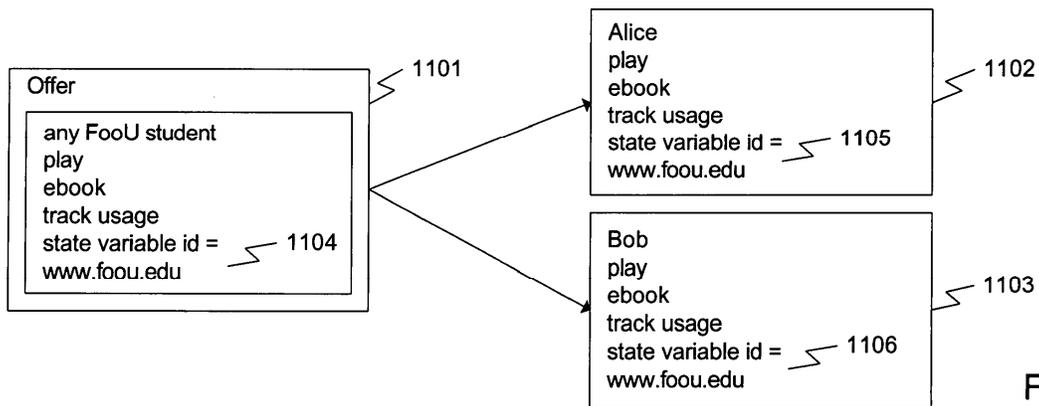


Fig. 11

Meta-rights are particularly useful in multi-party, i.e., multi-tier distribution models in which intermediate entities are relied on to issue rights and distribute content. (*Id.* at 6:1-8.) For example, Figure 2 of the ‘280 patent shows relationships between content providers, distributors and end users being managed through independently exercisable meta-rights.

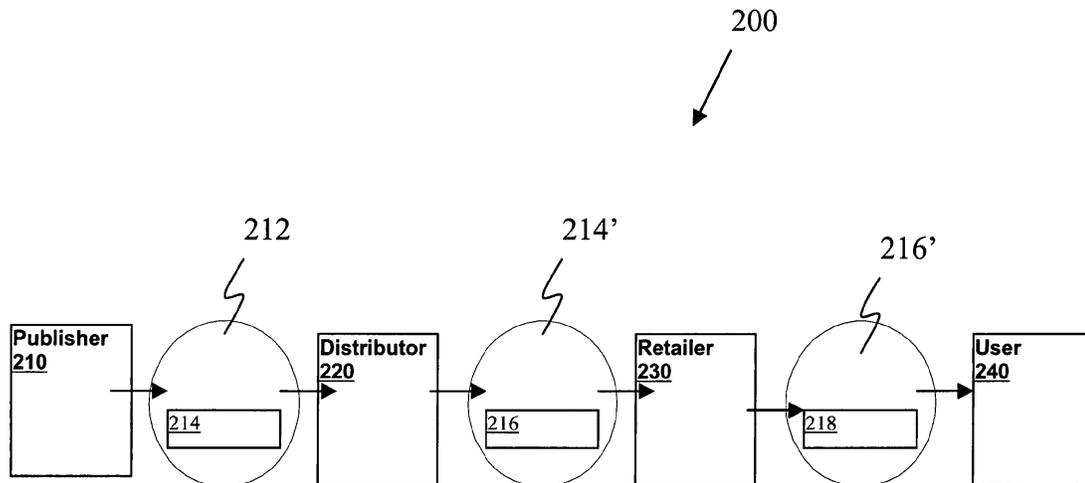


Fig. 2

As illustrated, Publisher 210 publishes content for distribution to distributors, such as Distributor 220, which distribute content to retailers, such as Retailer 230. Retailer 230 sells content to end users, such as User 240. (*Id.* at 6:19-22.) In this model, the parties may negotiate various business relationships with each other, including relationships in which a recipient receives usage rights beyond those possessed by the upstream party. (*Id.* at 6:22-27.) In such a model, meta-rights permit the Publisher to control what type and how many rights Distributor 220 may grant to Retailer 230, and what type and how many rights the Retailer 230 may grant User 240. (*Id.* at 6:47-52 and 58-60.)

For example, Publisher 210 may grant an independently exercisable meta-right 214 permitting Distributor 220 to grant Retailer 230 a usage right derived from the meta-right 214, such as the usage right 214' to distribute or sell. (*Id.* at 6:47-52.) The meta-right 214 also permits the Distributor to derive a meta-right

216, which in turn permits Retailer 230 to derive up to 500 usage rights 216' granting end users the right to view and print the digital work. (*Id.* at 6:53-57.) The retailer may also grant meta-right 218 permitting the user to share rights with other users. (*Id.* at 6:67-7:3.) As the Figure 2 illustrates visually, the meta-rights are separate from usage rights.

The '280 patent also explains that meta-rights can be specified using XrML, which is a type of rights expression language that can be used for meta-rights and usage rights. (*Id.* at 8:17-24 & Fig. 4.) The specification of a meta-right includes a specific grant, "such as rights to offer usage rights, grant usage rights, obtain usage rights, transfer usage rights, exchange usage rights" (*Id.* at 7:45-52.) It may also identify one or more parties to whom the meta-right is granted, and may include conditions and state variables, which control the exercise of the granted meta-right. (*Id.* at 7:53-58.)

Figure 12 illustrates an example of meta-rights containing conditions and state variables used in deriving other rights.

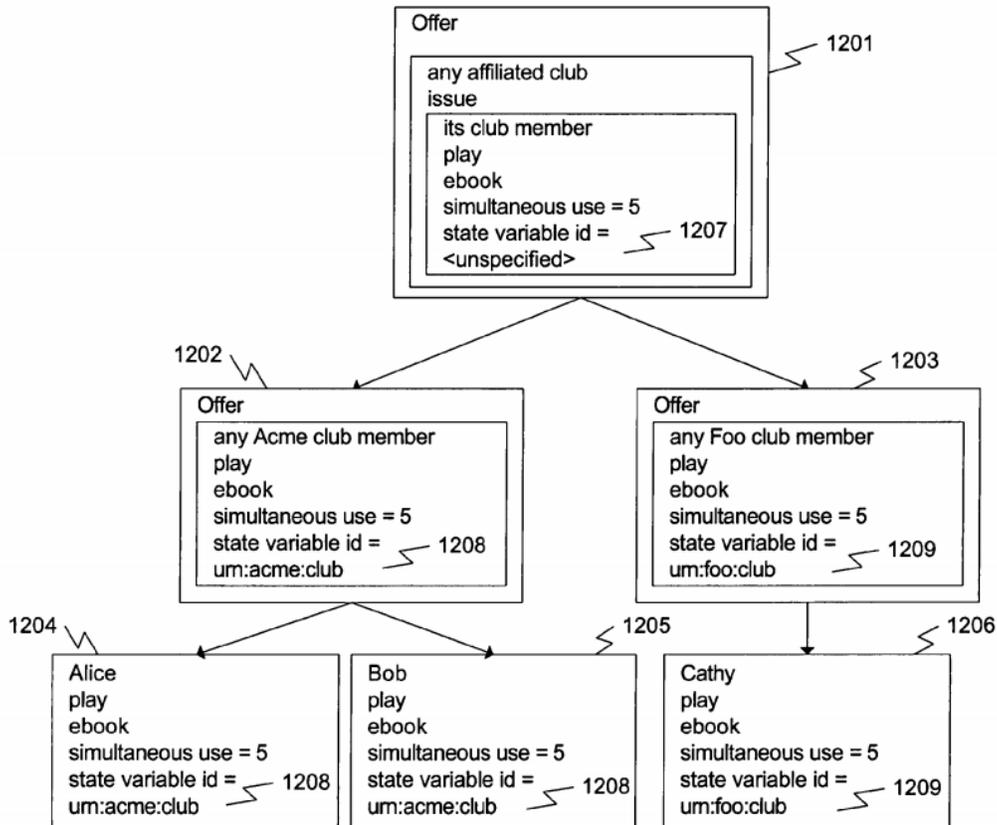


Fig. 12

A meta-right 1201 grants a distributor an independently exercisable right to issue site licenses for an e-book, but only to affiliated clubs, and subject to the further condition that each site license allow no more than five members to simultaneously play the e-book. (*Id.* at 12:57-62.) The meta-right 1201 specifies the conditions “affiliated club” and “simultaneous use = 5.” It also includes a state variable field 1207 for use in enforcing the affiliated club condition. (*Id.* at 12:62-64.) The meta-right 1201 is exercisable to derive corresponding meta-rights 1202 and 1203, granting the Acme and Foo clubs, respectively, the right to create and grant “play” usage rights to their members. (*Id.* at 12:64-13:4.) The exercise of this

meta-right creates other meta-rights, without anything happening to the content of the e-book. In the derived meta-rights, the state variable field is populated with the particular club identity. The usage rights 1204, 1205, 1206 derived from meta-rights 1202 and 1203 permit individual members to play the e-book, subject to the condition of no more than five members of one club playing the e-book simultaneously. (*Id.* at 12:59-13:8.) Thus, usage rights to play an e-book are created for downstream parties in a manner controlled by the content provider, but the creation of the new rights does not involve exercising any usage rights associated with the e-book or performing actions on the e-book's content.

The '280 patent permits associating state variables with both meta-rights and created usage rights. (*Id.* at 7:66-8:12; 8:35-45). For example, a usage right created through exercising a meta-right could have the right to print content three times, with the state variable being incremented with each print. After three prints the condition is exhausted and no more printing is allowed. (*Id.* at 7:66-8:10.) Another example of a state variable is time, where a user might only have the right to play a movie within thirty days. (*Id.* at 8:10-17.)

The '280 patent provides other examples of how state variables can operate with meta-rights. In one example illustrated in Figure 10, a personal computer (PC) of a user, Alice, can be configured to play an e-book according to a user rights license up to five times. Via a meta-right, a new right can be created so that

a personal data assistant (PDA) of Alice also can obtain a right to play the e-book, subject to the condition Alice can play the e-book a combined total of five times. This can be enforced because PC and PDA share the same state variables, “AlicePlayEbook.” (*Id.* at 12:25-32 and FIG. 10.)

In the example of Figure 11, a state variable identifies a location on a server (in this case, using the URL www.foo.edu) where a common state of rights is tracked. As described in the specification, the URL www.foo.edu could point to a common state of rights server as shown in box 801 of Figure 8 that has a common state of rights repository. (*Id.* at 10:55-61; see also 12:15-21.)

The ‘280 patent discloses a meta-rights manager module 510 in Figure 5, which processes requests for exercising a meta-right, which involves verifying the existence of a valid license embodying the meta-right, and evaluating whether the state variables and conditions of the license embodying the meta-right are satisfied. (*Id.* at 8:56-9:13.) If all requirements are satisfied, the meta-right can be exercised. The meta-rights manager exercises the meta-right and invokes a license manager 504 to create the new rights. (*Id.* at 9:33-43.)

III. CLAIM CONSTRUCTION

In a CBM patent review, the Board construes claim terms in an unexpired patent using their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.300(b). The claim language should

be read in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Cuozzo Speed Techs., LLC*, No. 2014-1301, 2015 U.S. App. LEXIS 1699, at *14 (Fed. Cir. Feb. 4, 2015); *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). The broadest reasonable meaning given to claim language must take into account any definitions presented in the specification. *Id.* (citing *In re Bass*, 314 F.3d 575, 577 (Fed. Cir. 2002)). Under this standard, 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. *See In re Abbott Diabetes Care, Inc.*, 696 F.3d 1142, 1149-50 (Fed. Cir. 2012)(vacating Board’s rejection of claims based on incorrect construction of “electrochemical sensor”, which was inconsistent with meaning ascertained in view of entire specification.); *see also In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007)(citing *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005)(en banc)).

A. Level of Ordinary Skill in the Art

The Goldberg Declaration submitted with the Petition defines the level of ordinary skill in the art as a person with a bachelor’s degree in electrical engineering, computer science or a related field with a few years (e.g., two years) of experience with digital content distribution and/or computer security. (Ex. 1014 at ¶10.) CG agrees with this definition. (Ex. 2009 at ¶16.)

B. Response to the Board’s Claim Construction

Google proposed constructions for the terms: (1) “rights”; (2) “license”; (3) “state variable”; (4) “repository”; and (5) “meta-right.” (Paper 1 at 27-36.)

1. Rights

The parties have agreed that the term “rights” refers to a usage right or meta-right, depending on the context. The Board noted the parties’ agreement, and it did not construe this term differently. (Paper 9 at 14.)

2. License

The parties are also in agreement that the term “license” means “data embodying a grant of rights,” that is, usage rights or meta-rights. The Board also noted this agreement, and did not construe this term differently. (*Id.*)

3. Repository

The Board construed “repository” to refer to “a trusted system which maintains physical, communications, and behavioral integrity, and supports usage rights.” The Board further concluded that “physical integrity” means “preventing access to information by a non-trusted system”; “communications integrity” means “only communicates with other devices that are able to present proof that they are trusted systems, e.g., by using security measures such as encryption, exchange of digital certificates, and nonces”; and “behavioral integrity” means “requiring software to include a digital certificate in order to be installed in the repository.” (Paper 9 at 21.) These constructions comport with the definitions applied by a

Panel in prior *inter partes* review proceedings, and the Decision notes that Google had proposed that the same definitions be applied in this proceeding. (*Id.* at 19-20.)

CG largely agrees with the Board’s construction of “repository,” but desires to make of record of its minor disagreements with the Board’s construction. CG contends that “repository” is more accurately described as: “a trusted system *in that it maintains physical, communications, and behavioral integrity in the support of usage rights.*” While similar to the Board’s construction, this proposal better comports with the following definition of repository in the glossary section of the ‘012 patent incorporated by reference in the ‘280 patent:

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. 1002 at 53:23-27.) The three integrities are what make a repository a trusted system, and a repository provides these core functionalities in the support of usage rights. (Ex. 2009 at ¶51.)

CG agrees with the Board’s constructions of “communications integrity.” CG agrees with the Board’s construction of “behavioral integrity,” with the understanding that a digital certificate is an assurance that downloaded software comes from a trusted source known to the repository. (Ex. 2009 at ¶52.) It also

agrees with the Board’s construction of “physical integrity”, but with the further understanding that the information to which access is prevented is “content” (or secret information of the repository itself). (*Id.*) The incorporated disclosure of the ‘012 patent states that “Physical integrity applies both to the repositories and the protected digital works” (Ex. 1002 at 12:53-54) and that “repositories never allow non-trusted systems to access works directly.” (*Id.* at 12:61-62.)

4. State Variable

The Board construed “state variable” to mean: “a variable having a value that represents status of rights, or other dynamic conditions.” (Paper 9 at 19.) CG accepts this definition for purposes of this proceeding. (Ex. 2009 at ¶53.)

5. Meta-right

The Board characterized the following passage in the ‘280 specification as an explicit definition of the term “meta-right”:

Meta-rights are the rights that one has to generate, manipulate, modify, dispose of or otherwise derive other rights.

(Paper 9 at 16, citing Ex. 1001 at 5:47-49.) The Board disagreed with CG’s proposed construction: “a right that, when exercised, creates or disposes of usage rights (or other meta-rights) but that is not itself a usage right because exercising a meta-right does not result in action to content.” (Paper 9 at 15-17.) Although CG’s proposal tracks the construction adopted by the district court in the pending litigation based on the same patent specification (*see* Paper 8 at 30-32, citing Ex.

2001 at 102–06), the Board gave two reasons for declining to adopt it. CG respectfully disagrees with the Board’s rationale.

Regarding the Board’s first concern - that CG’s proposal would render the claim language “a meta-right specifying a right that than can be created when the meta-right is exercised” superfluous (Paper 9 at 16.) – the proposal introduces no more redundancy than the Board’s proposal, which also indicates that a meta-right can generate another right. As both proposals reflect, the term “meta-right” itself is not limited to a right to create other rights; it also encompasses, for example, a right to dispose of other rights. The additional claim language mentioned by the Board is not superfluous of either construction because it further limits claim 1 to a specific application of meta-rights for use in creating new rights.

CG also disputes the Board’s contention that the language “is not itself a usage right because exercising a meta-right does not result in action to content” would impart extraneous limitations into the claims. (*Id.* at 17.) The Board relied on *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243 (Fed. Cir. 1998) and *E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430 (Fed. Cir. 1988). The canons of claim construction explained in those cases directly support CG’s proposed construction.

The *E.I. du Pont de Nemours & Co.* case involved claims to copolymers described both in terms of molecular structure and certain physical properties (such

as X-ray crystallinity, melt index and density). *E.I. du Pont de Nemours & Co.*, 849 F.2d at 1432. The Federal Circuit held that the district court erred in construing the claims to require two additional physical properties (i.e., environmental stress crack resistance and impact strength) because they were not recited in, and were therefore extraneous to, the claims. *Id.* at 1433-34. The court explained:

By ‘extraneous,’ we mean a limitation read into a claim from the specification wholly apart from any need to interpret what the patentee meant by particular words or phrases in the claim.

Id. at 1433. The two properties were extraneous because there was no term already in the claims that could be interpreted to require the additional properties. The court also instructed, however, that “[i]t is entirely proper to use the specification to interpret what the patentee meant by a word or phrase in the claim.” *Id.*

The *Renishaw PLC* case further illustrates this principle. That case involved a patented touch probe used to measure the dimensions of machined parts during manufacturing. *Renishaw PLC*, 158 F.3d at 1245. The asserted patent claim recited a probe that functions to generate a trigger signal “when” a sensing tip contacts an object. *Id.* at 1246. The parties disputed whether “when” means “as soon as” contact is made or has a broader meaning such as “at or after the time” that contact is made. *Id.* at 1250-51. The patentee proffered broad dictionary definitions of

“when” and argued that any narrower construction would entail reading in an extraneous limitation from the specification. *Id.*

The Federal Circuit rejected the patentee’s argument. The court reiterated that “one may look to the written description to define a term already in a claim limitation, for a claim must be read in view of the specification of which it is a part.” *Id.* at 1248. The court distinguished the circumstance, illustrated in cases such as *E.I. du Pont de Nemours & Co*, where a party attempts to limit claim scope based solely on statements in the specification. The court instructed, “[w]ithout any claim term that is susceptible of clarification by the written description, there is no legitimate way to narrow the property right.” *Id.* at 1248. But when a patent applicant recites a claim term and elects to define a recited claim term in the specification, such definition controls so long as it appears “with reasonable clarity, deliberateness, and precision.” *Id.* at 1249 (quoting *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994)).

Several specification passages of the patent asserted in *Renishaw PLC* described the objectives and operation of the disclosed invention. While no passage set forth an express definition of “when,” the court found that they collectively “show that the patentee wanted ‘when’ to mean as soon as possible after contact.” *Id.* at 1251-52. To effectuate the inventor’s intent of minimizing the delay between contact and signaling, as expressed in the patent specification, the

court construed “when” to connote “a nonappreciable period of time after contact.”
Id. at 1253.

CG’s proposed construction of “meta-right” faithfully follows the claim construction canons of these cases and the full body of USPTO and Federal Circuit claim construction jurisprudence. Because “meta-right” is a recited claim term, construing the term consistent with the intended meaning expressed in the patent specification does not entail reading in extraneous limitations. The Board’s own construction is taken from the specification. And because “meta-right” has no ordinary and accustomed meaning, the surrounding context of the patent specification is of heightened importance.

The issue is not whether construing “meta-right” based on the specification improperly imparts extraneous limitations to the claims. Rather, the question is whether the Board’s proposal reflects the full meaning of the term as expressed in the specification with reasonable clarity and deliberateness. CG respectfully submits that it does not.

The ‘280 specification as a whole evidences the applicant’s objective to overcome certain constraints associated with the known DRM concept of usage rights. One passage indicates that “the preferred embodiment extends the known concepts of usage rights” (Ex. 1001 at 5:42-44.) As the Martin Declaration explains, the ‘280 patent specification conveys that a “meta-right” has certain

characteristics that a person of ordinary skill in the art would consider definitional. (Ex. 2009 at ¶55.) As the Board noted, “[m]eta-rights are the rights that one has to generate, manipulate, modify, dispose of or otherwise derive other rights.” (Paper 9 at 17, citing Ex. 1001 at 5:46-48.) CG agrees that this passage states a fundamental characteristic of meta-rights. However, the passage contains nothing to suggest that it expresses the full intended meaning of the term. Indeed, the same paragraph concludes by instructing that “[t]his concept will become clear based on the description below.” (*Id.* at 5:49-50.)

The specification then goes on to state another fundamental characteristic of meta-rights:

[T]he difference between usage rights and meta-rights are the result from exercising the rights. When exercising usage rights, actions to content result. . . . When meta-rights are exercised, new rights are created from the meta-rights or existing rights are disposed as the result of exercising the meta-rights.

(*Id.* at 7:24-30.) A person of ordinary skill would conclude that another essential definitional characteristic of the term “meta-right” is that it defines a right distinct from a usage right in that the exercise of a meta-right does not result in actions to content. (Ex. 2009 at ¶56.) The passage above is not inconsistent with the statement in Column 5 of what meta-rights “are.” It expands on that description by clarifying that meta-rights are not usage rights and are exercisable to generate,

manipulate, modify, dispose of or otherwise derive other rights without performing actions to the content of the digital work. (*Id.*)

“So long as the meaning of an expression is made reasonably clear and its use is consistent within a patent disclosure, an inventor is permitted to define the terms of his claims.” *Lear Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 889 (Fed. Cir. 1984). It is not required that the intended meaning be conveyed as an explicit definition. *In re Abbott*, 696 F.3d at 1150 (“We have held that even when guidance is not provided in explicit definitional format, the specification may define claim terms by implication such that the meaning may be found in or ascertained by a reading of the patent documents.”) (internal citation omitted).

The inventors’ intent to distinguish meta-rights from usage rights that act on content is clearly and unequivocally expressed. The differentiation is stated explicitly. The remaining disclosure of the ‘280 patent consistently reinforces the intended differentiation of meta-rights from usage rights. As explained above, meta-rights and usage rights are managed by different components of the exemplary DRM system disclosed. The specification illustrates several DRM scenarios involving meta-rights. These examples consistently involve meta-rights that are distinct from usage rights and are exercised to create usage rights. (*See, e.g., Ex. 1001 at Figs. 9–16.*) In each example, exercise of the illustrated usage

rights result in actions to content, whereas exercise of the illustrated meta-rights do not. (Ex. 2009 at ¶57.)

This is not a circumstance where a patentee attempts an after the fact narrowing of claim scope by reading in extraneous claim limitations to avoid prior art. To the extreme contrary, the applicant for the ‘280 patent acknowledged the prior art usage rights type DRM schemes of the Stefik patent and expressed a clear intent at the time of filing to limit the ‘280 invention to an enhancement built on the distinct concept of meta-rights. To construe “meta-right” more broadly than the precise meaning expressed by the applicant when contrasting meta-rights from Stefik’s usage rights, while maintaining that the resulting claim may not distinguish over Stefik’s disclosed usage rights, fails to respect the inventors’ right to be his own lexicographer. To give effect to the inventors’ disclosed intent, the broadest reasonable interpretation of “meta-right” should reflect that a meta-right is not a usage right and that exercising a meta-right does not result in action to content.

The district court’s construction incorporates these characteristics of a meta-right. (Ex. 2001 at 102–06.) Although a slightly different claim construction standard applies in litigation, the district court based its ruling on the same evidence as the Board, i.e., the ‘280 patent specification, which is the most important evidence of claim meaning in the litigation context. *See Phillips*, 415

F.3d at 1321. There is no reason to conclude that a person of ordinary skill would arrive at a different understanding under the broadest reasonable construction approach, which also requires construing the claims in the context of the entire patent disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007)(citing *Phillips*, 415 F.3d 1303).

Google’s proposed construction in the litigation indicated that a meta-right “is distinct from a usage right associated with the item of content.” (Ex. 2001 at 102.) Google therefore expressly endorsed the essence of the district court’s ruling that a meta-right “is not itself a usage right. (*Id.* at 106.) And Google’s expert in this proceeding, Dr. Goldberg, agreed at deposition that a person of ordinary skill in the art would conclude from the ‘280 specification that exercising a meta-right does not result in action to content. (Ex. 2010 at 48:20-49:8.)

Therefore, the Board should adopt CG’s proposed construction of the term “meta-right.” Alternatively, CG would accept a modification to the Board’s proposal clarifying that exercising a meta-right does not result in action to content: “a right that one has to generate, manipulate, modify, dispose of or otherwise derive another right, and that is not a usage right because it does not result in action to content when exercised.”

IV. THE '280 PATENT IS NOT ELIGIBLE FOR COVERED BUSINESS METHOD PATENT REVIEW

The burden is on Google to establish that the '280 patent is eligible for CBM patent review. *See* 37 C.F.R. § 42.304(a); *see also* 77 Fed. Reg. 48756, 48763 (Aug. 14, 2012)(same). Google has not meet this burden, and GC opposes the Petition and maintains its objection to this proceeding on that basis.

In its Decision, the Board determined that the '280 patent is eligible for CBM review because claim 1 involves “transferring rights adapted to be associated with items from a rights supplier to a rights consumer” and such transfer of rights “is an activity that, at the very least, is incidental or complementary to a financial activity.” (Paper 9 at 6-12.) The Board also found that the '280 patent is not excluded from CBM review because “the only feature recited in the body of the claim that resembles a technological feature is the claimed ‘repository,’” and accordingly “claim 1, as a whole, does not recite a technological feature that is novel and unobvious over the prior art” according to 37 CFR §42.301(b). (*Id.* at 11-12.)

CG respectfully submits that the Board applied the standards for CBM eligibility to the '280 patent incorrectly, as discussed below.

A. The ‘280 Patent Does Not Claim A Financial Activity And Is Context Neutral

AIA §18(d)(1) and 37 C.F.R. §42.301(a) define a covered business method patent as one “that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions.” In promulgating rules for covered business method reviews, the USPTO considered the legislative intent and history behind the AIA’s definition of “covered business method patent” and found that the “legislative history explains that the definition of covered business method patent was drafted to encompass patents *claiming* activities that are financial in nature, incidental to a financial activity or complementary to a financial activity.” 77 Fed. Reg. 48735–36 (*citing* 157 Cong. Rec. S5432 (daily ed. Sept. 8, 2011)(statement of Sen. Schumer)(emphasis added).) The legislative history states further that, “[a]t its most basic, a financial product is an agreement between two parties stipulating movements of money.” *Id.* However, “claims [that] on their face are directed to technology ‘common in business environments across sectors’ with ‘no particular relation to the financial services sector,’” are outside the scope of covered business method patent review. *FedEx Corp. v. Katz Technology Licensing*, CBM2015-00053, Paper 9 at 10 (PTAB June 29, 2015)(*citing* 157 Cong. Rec. S5441 (daily ed. Sept. 8, 2011)(statement of Sen. Leahy).) In making the determination of

whether a given patent is eligible for CBM review, the Board’s focus is to be “firmly on the claims.” *Par Pharmaceutical, Inc. v. Jazz Pharmaceuticals, Inc.*, CBM 2014-00149, Paper 12 at 9 (Jan. 13, 2015).

1. The Decision Focused On Optional Financial Uses Of The Technology Disclosed In The Specification, Rather Than The Required Steps Of The Claims

The ‘280 patent covers methods, systems, and devices used for data access control in the context of computer security, specifically, in connection with the creation and management of rights to digital content. In analyzing the financial subject matter aspect of CBM eligibility, the Board did not adequately consider the claims of the ‘280 patent, and instead focused its inquiries primarily on the specification. The Board addressed only the preamble of claim 1, i.e., “[a] computer implemented method for *transferring rights adapted to be associated with items from a rights supplier to a rights consumer.*” (Paper 9 at 9)(emphasis in original.) The Decision appears to have treated the preamble as a limitation of the claim, and does not specifically analyze any of the steps of the claimed method. However, “[p]reamble language that merely states the purpose or intended use of an invention is generally not treated as limiting the scope of the claim.” *See Bicon, Inc. v. Strauman Co.*, 441 F.3d 945, 952 (Fed. Cir. 2006); *see Par Pharmaceutical, Inc. v. Jazz Pharmaceuticals, Inc.*, CBM 2014-00149, Paper 11 at 12 n.8, 23-24 (Jan. 13, 2015)(declining to consider

descriptive clauses in preamble for CBM eligibility analysis because they are not method steps.)

Furthermore, that an activity involves the transfer of rights is alone insufficient to characterize the activity as financial in nature. Some activities involving transferring rights are financial (e.g., purchase of stock, sale of products, etc.), while others are not (e.g., transfer of rights by gift, delegating rights from employer to employee, giving property by will, etc.). That the method of claim 1 is intended for use in transferring rights in digital content is not dispositive of whether it claims activities that are financial in nature.

As set forth above, the method of claim 1 has three steps: (1) “obtaining a set of rights associated with an item, the set of rights including a meta-right ...”; (2) “determining, by a repository, whether the rights consumer is entitled to the right specified by the meta-right” and (3) “exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right” (Ex. 1001 at 15:10-22.) On their face, none of these steps, nor the preamble, bear any relation to a financial product or service or any financial activity. The remaining aspects of the claim, specifying the use of a state variable for determining a state of the created right and enforcement of the digital meta-right by a repository, are also non-financial.

The Decision states “the transfer of rights associated with an item from a supplier to a consumer is an activity that, at the very least, is incidental or complementary to a financial activity.” (Paper 9 at 9.) It reasons that this conclusion is supported because “the specification discloses that the transfer of rights associated with an item from a supplier to a consumer *may require* the payment of a fee and processing by a clearinghouse.” (*Id.*)(emphasis added.) The Decision then cites four examples from the specification that discuss payment of fees. (*Id.*) However, none of these examples discuss any of the steps of claim 1, nor do they demonstrate that any step of any claim of the ‘280 patent *requires* payment of a fee. Indeed, the cited portions of the specification clearly disclose that payment of fees in connection with the exercise of meta-rights and usage rights is optional and merely one possible condition on the exercise of the right. (*See, e.g.,* Ex. 1001, 4:3-14: “rights label 40 *may* include usage rights permitting a recipient to view content for a fee . . .”; 4:39-43: “For, example a condition [on the exercise of a specified right] *may* be the payment of a fee, submission of personal data, or any other requirement desired . . .”; 5:4-11: describing steps for requesting content, including satisfying “appropriate conditions and other prerequisites, *such as* the collection of a fee and verification that the user has been activated. . .”; 5:35-37: “Clearinghouse 90 *can be* used to process payment transactions and verify payment prior to issuing a license.”) While the invention may be implemented in

scenarios that involve payment of fees in connection with exercising meta-rights or usage rights, those financial activities are simply not required by the claims, and do not support a conclusion that the claimed method is necessarily incidental or complimentary to financial activity.

Besides teaching that fee payments are merely an optional condition on the exercise of rights, the specification also describes implementations of the invention that would be understood to not involve payment of a fee, such as controlling content usage within an organization or enterprise (*Id.* at 6:61-67, 14:41-44), managing distribution of medical records between hospitals (*id.* at 7:6-17), managing distribution of legal documents between law firms and third parties (*id.* at 7:17-22), and sharing rights to e-books between a librarian and students in a university library system. (*id.* at 12:39-50.) This reinforces that the claimed invention may be used in a variety of sectors and has no particular relation to the financial services sector.

As discussed below, the Decision appears to have relied on Google's faulty assertion that all patents disclosing embodiments relating to a financial activity are necessarily eligible for CBM review. But that view is directly contrary to the statute itself, its legislative history, and numerous PTAB decisions directly addressing the subject.

2. Google Relied On An Incorrect Standard For CBM Review

Google makes no attempt to show that the ‘280 claims actually *claim* a method for “performing data processing” or “other operations” that are “used in the practice, administration, or management of a financial product or service” in accordance with AIA §18(d)(1). It argues instead that the claims “encompass embodiments that are financial in nature, incidental to financial activity or complementary to a financial activity.” (Paper 1 at 10.) However, under the standard pronounced by the USPTO, the question is not whether the ‘280 claims *could read on* a financial activity or an activity incidental or complementary to a financial activity, but rather whether the ‘280 patent *claims, i.e., requires*, such activities. *See* AIA §18(d)(1); 77 Fed. Reg. 48735–36.

There is a critical difference between a patent that “claims” an activity and one that “encompasses” the activity. “Claiming” in the patent sense means “requiring.” To claim an activity, a patent must affirmatively recite the activity as a requirement of one or more limitations defining the legal scope of the invention. “Encompassing” refers to the full scope of possible embodiments or implementations of the invention that meet the recited claim limitations. That a claim encompasses an activity says nothing of whether the activity itself is a required claim limitation. If the legal standard required merely assessing whether a

claim “encompasses” financial embodiments, as Google proposes, nearly all patents related to processing data or other operations would be CBM eligible.

In *Sony Corp. of America v. Network-1 Techs., Inc.*, CBM2015-00078, Paper 7 at 9-12 (PTAB July 1, 2015), the Board found petitioner’s argument that claims are CBM eligible because the claims “cover” financial products to be inconsistent with the statutory language, “which requires us to focus on what the challenged patent claims.” The Board recognized that “[p]etitioner’s position, in essence, would mean that any patent claiming something that can be used in connection with a financial service (e.g., an Ethernet cable, a generic computer monitor, or even a ballpoint pen) would be eligible for covered business method patent review, regardless of what the patent claims.” *Id.* at 12. Google’s argument is erroneous for the exact same reason.

The mere possibility of encompassing a financial activity, or an activity incidental or complimentary to a financial activity, is not enough to confer CBM eligibility. Instead, the claim must require activity that is itself financial in nature or is necessarily incidental or complimentary to a financial activity to confer CBM eligibility. In *FedEx Corp. v. Katz Technology Licensing*, the Board declined to find that claims were incidental to an activity that is financial in nature when the specification disclosed that the invention could be used in activities that did not “necessarily” involve “movements of money.” CBM2015-00053, Paper 9 at 11.

The Board explained that while the statutory language “financial product or service” should be interpreted broadly,” it also “has limits and does not cover every method that *might* be used in a way that is incidental or complementary to a financial activity.” *Id.* at 9 (citing *Salesforce.com, Inc. v. Applications in Internet Time LLC*, CBM2014-00162, Paper 11 at 9-10 (PTAB Feb. 2, 2015).)

Similarly, claims like those at issue here having no particular relation to a financial service are ineligible for CBM review. In *Salesforce.com*, the Board found claims directed to an “integrated system for managing changes in regulatory requirements . . . for business activities at an industrial or commercial facility” applicable to many business sectors with no particular relation to financial services sector. CBM2014-00162, Paper 11 at 9-10. The patent specification indicated that the invention could be implemented to benefit banking, financial and securities activities. *Id.* at 10. Citing the legislative history, the Board held that claims are nevertheless outside the scope of covered business method patent review. *Id.* at 9.

Numerous other PTAB decisions have denied CBM review in similar circumstances. *See, e.g., Sega of Am., Inc. v. Uniloc USA, Inc.*, CBM2014-00183, Paper 11 at 11–13 (PTAB Mar. 10, 2015)(claims directed to “technology that restricts the use of software” where the software had “no particular relationship to a financial product or service”); *J.P. Morgan Chase & Co. v. Intellectual Ventures II LLC*, CBM2014-00160, Paper 11 at 6–12 (PTAB Jan. 29, 2015)(claims directed

to secure electronic communications had “general utility not limited or specific to any application”); *PNC Fin. Servs. Group, Inc. v. Intellectual Ventures I LLC*, CBM2014-00032, Paper 13 at 6–15 (PTAB May 22, 2014)(claims directed to “software systems that have general utility not specific to any application.”)

Other recent decisions are also in accord. For example, the Board has held that context-neutral claims that lack language relating to a financial product or service to be outside the scope of CBM review, even though specification disclosed the invention could be used in connection with financial products or services, such as stock quotes. *See Google Inc. v. Simplair, Inc.*, CBM2015-00020, Paper 11 at 11-12 (PTAB May 19, 2015). In *Fairchild Semiconductor Corp. v. In-Depth Test LLC*, the Board denied CBM review of patent claims that lacked any recitation of financial activities despite petitioner’s argument that relied on potential uses of a product related to the patent. CBM2015-00060, Paper 11 at 8 (PTAB August 3, 2015). The Board noted that the statutory language “requires us to focus on the challenged claims rather than speculate on possible uses of products recited in the claims.”

The Federal Circuit’s recent opinion in *Versata Development Group, Inc. v. SAP America, Inc.*, Slip Op. 2014-1194 (Fed. Cir. July 9, 2015) does not support CBM review of ‘280 patent. That case held that the language of §18(d)(1) does not limit CBM review only to “products and services of [] the financial industry, or to

patents owned by or directly affecting the activities of financial institutions such as banks or brokerage houses.” *Id.* at 35. CG has never argued that CBM review is so limited. Instead, as discussed above, CG contends that claims that are context-neutral and do not *necessarily* relate to a financial activity are outside the scope of CBM review. *See, e.g., FedEx Corp., CBM2015-00053, Paper 9 at 11. Versata* does not hold to the contrary. *See Versata, Slip Op. 2014-1194 at 35-36.*

In *Versata*, the representative claim at issue was directed to “a method for determining a price of a product offered to a purchasing organization” including steps such as “storing pricing information”; “retrieving applicable pricing information corresponding to the product”; “sorting the pricing information according to pricing types”; and “determining the product price using the sorted pricing information.” *Id.* at 9. The PTAB in the underlying CBM review found that the *Versata* patent claims “methods and products for determining a price” and “are complementary to a financial activity and relate to monetary matters,” therefore “are considered financial products and services under §18(d)(1)”. *Id.* at 33. The Federal Circuit agreed that the *Versata* patent falls “well within the terms of the statutory definition.” *Id.* at 36.

The ‘280 claims on their face, unlike the claims of the *Versata* patent, have no limitations that relate to monetary matters. The *Versata* claims were complementary to a financial activity because, even if determining pricing of a

product is not a “financial product or service,” the utility of determining product pricing only relates to the financial activity of selling products. On the other hand, claim 1 of the ‘280 patent claims no activity that is necessarily incidental or complementary to a financial activity. Further, the ‘280 specification confirms that the invention can readily be practiced in applications where money is not exchanged, such as controlling access to medical records in a hospital setting or loaning of e-books in a library setting. (Ex. 1001 at 7:6-17, 12:39-50.) Accordingly, *Versata* is also distinguishable on its facts and provides no reason to find the ‘280 patent CBM eligible.

The Board’s Decision is in tension with the application of CBM eligibility standards in the above-referenced decisions. While the ‘280 claims have commercial applications that may involve payment of fees by a consumer, this is insufficient to confer CBM eligibility. Casting such a wide net would haul in a vast array of patents, contrary to the legislative history’s demonstrated intent to exclude patents directed to methods used in commerce that have no particular relation to the financial services industry. *See, e.g.*, 157 Cong. Rec. S5441 (daily ed. Sept. 8, 2011)(statement of Sen. Leahy). As discussed above, the ‘280 patent specification demonstrates that the methods taught therein need not be practiced in connection with, or in support of, transfers of rights involving movements of money. The claimed method can be readily practiced in settings that do not involve sale or

payment. The '280 patent claims are context-neutral and can be used in numerous non-financial settings, which places the '280 patent outside the scope of CBM review.

3. The Decision Misapprehends CG's Preliminary Arguments

CG submits that the Board misapprehended CG's previous arguments as addressing only whether claims "explicitly recite financial products or services." (Paper 9 at 8.) CG certainly emphasized that the primary focus of the analysis is the claims, and that the '280 patent does not claim a financial product or service. However, CG also acknowledged that CBM eligibility extends to patents "claiming activities that are financial in nature, incidental to a financial activity or complimentary to a financial activity." (Paper 8. at 4-5.) CG then went further to address the important distinction between patents claiming activities that are financial in nature or incidental or complimentary to financial activities, and those claiming methods used in commerce generally. (Paper 8 at 5-8.) CG addressed several prior PTAB decisions which hold that Congress did not intend CBM eligibility to be satisfied by a mere showing that a patent can be used in commerce or covers core activities of running a business. *Par Pharmaceutical*, for example, presents a detailed analysis of the legislative history and concludes that there is no clear and compelling evidence of legislative intent to include any business method "used in commerce" within the definition of a covered business method patent.

CBM2014-00149, Paper 12 at 16-19. (Paper 8 at 6-7.) That the method in *Par Pharmaceutical* of controlling access to a prescription drug could be used in commerce was insufficient to show that the method is necessarily “used in the practice, administration, or management of a financial product or service.” *Id.* at 17.

The same conclusion follows here as in *Par Pharmaceutical*. The ‘280 claims do not recite the movement of money, extension of credit, etc., or methods that by their very nature are incidental or complimentary to those or other financial activities. The creation or transfer of rights in digital content are not inherently financial activities. Controlling access to and usage of digital content is a universal concern, not a concern peculiar to financial transactions. Because the claimed technology is not “financial” in nature, it does not qualify for CBM review.

B. The ‘280 Claims As A Whole Specify A “Technological Invention” And Are Not Eligible For CBM Review For This Additional Reason

The definition of “covered business method patent” in Section 18(d)(1) of the AIA excludes patents for “technological inventions.” To determine whether a patent is for a technological invention, the Board considers “whether the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art; and solves a technical problem using a technical solution.” 37 C.F.R. § 42.301(b). The Board considers in this analysis whether the claims represent “mere recitation of known technologies,” “[r]eciting the use of

known prior art technology to accomplish a process or method,” or “[c]ombining prior art structures to achieve the normal, expected, or predictable result of that combination.” 77 Fed. Reg. 48756, 48763–64.

The Board held that the ‘280 patent is not excepted from CBM review for specifying a “technological invention” because “the only feature recited in the body of [claim 1] that resembles a technological feature is the claimed ‘repository,’” which is in the prior art. (Paper 9 at 11-12.) The Board further found that regardless of whether the method of claim 1 “impart[s] a novel and non-obvious way of processing or transmitting rights associated with an item from a supplier to a consumer, this claim only uses known prior art technology—namely, the claimed ‘repository’—to accomplish this method.” (*Id.* at 12.)

But the claims recite a number of novel technical features – for example: meta-rights that specify a right that can be created when the meta-right is exercised; determining by a repository if the rights consumer is entitled to the specified right; and exercising the meta-right to create the specified right if the rights consumer is entitled to the right. (Ex. 1001 at 15:6–22.) These combined features represent a technical solution to a technical problem that arises in the computer security context, namely, the control of the creation of rights to digital content at various stages of a complex distribution chain. Moreover, the novel meta-rights construct, which is implemented in combination with a repository

provides new functionality to repositories not previously known at the time of the ‘280 patent. Therefore the meta-right construct, alone, and as implemented by the steps of the claims, represents a new and nonobvious technological feature.

Neither Google’s Petition, nor the Decision, address whether the implementation of meta-rights is a technological feature. However, the ‘280 patent identifies meta-rights as an important distinguishing feature over the prior art. (*See, e.g.,* Ex. 1001 5:43-46: “The preferred embodiment extends the known concepts of usage rights . . . to incorporate the concept of ‘meta-rights.’”) Meta-rights, when implemented with repositories and state variables, impart repositories with new functionality not previously known. As the specification explains, distribution models may include entities that are not creators or owners of digital content, but are in the business of manipulating the rights associated with the content. (Ex. 1001 at 6:1–4.) For example, in a multi-tier content distribution model, intermediate entities (e.g., distributors) typically will not create or use the content but will be given the right by the upstream supplier (i.e., the content creator or publisher) to issue rights for the content they distribute. (*Id.* at 6:5-10.) However, previously known systems limited intermediate entities’ ability to grant rights that they themselves did not have, requiring the content publisher to specify all possible rights that all downstream users might require. (*Id.* at 2:43-48.) In some cases, such

a scheme did not allow the content publisher to retain the desired amount of control over its content. (*Id.* at 2:23-48.)

To address this problem, the '280 patent provides that the distributor or reseller can obtain meta-rights, which enable the distributor or reseller to create new usage rights that the distributor or reseller does not already have themselves. (*Id.* at 6:4–10.) The technical step of “exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right” recited in claim 1 is a technical solution to this technical problem.

The specification explains how the digital meta-right construct provides different technical functionality than the known construct of usage rights. Usage rights define and control the manner in which digital content may be used. (*Id.* at 2:14-18.) Meta-rights function to create, manipulate, modify, dispose of or derive other rights. (*Id.* at 5:47-49.) Actions to digital content result from the exercise of usage rights; whereas exercising a meta-right creates or disposes of rights. (*Id.* at 7:24-31.)

Despite the recitation of the novel implementation of meta-rights, the Decision concludes that the only technological feature claimed is the repository. However, the “technological feature” test is to be assessed based on the claimed subject matter as a whole, and not based on individual limitations in the claims. 37

C.F.R. § 42.301(b); *See also E*Trade Financial Corp. v. Droplets*, CBM2014-00124, Paper 15 at 5 (PTAB October 30, 2014)(finding that mere reference to where each element of the claim is found in the prior art is insufficient to show the claims lack a technological feature that is novel and unobvious.) The Decision further states that “regardless of whether the method steps of ‘obtaining,’ ‘determining,’ and ‘exercising’ recited in independent claim 1 impart a novel and non-obvious way of processing or transmitting rights . . . this claim only uses known prior art technology—namely, the claimed ‘repository’—to accomplish this method.” (Paper 9 at 12.) This rationale appears to have applied guidance from the Office Patent Trial Practice Guide that “[r]eciting the use of known prior art technology to accomplish a process or method, even if that process or method is novel and non-obvious” is a claim drafting technique that “typically would not render a patent a technological invention.” 77 Fed. Reg. 48756, 48763–64 (Aug. 14, 2012). But claim 1 does not merely recite use of prior art technology to accomplish a process or method. It recites a novel meta-right digital construct implemented via a repository having enhanced functionality relative to prior known repositories.

The claimed repository functions to determine whether a consumer is entitled to receive the new right specified in a meta-right. It further functions to create the new right if the consumer is entitled to it, and to include a state variable

in the new right for use in determining the state of the created right. As discussed in the specification, this provides greater control over the use and distribution of digital content, such as allowing content publishers to grant rights to certain downstream users (such as an end user) without granting the same rights to each intermediate downstream party (such as a content distributor). (*See, e.g.*, Ex. 1001 at 6:47-60.) Known prior art repositories supported only usage rights. Neither the meta-right construct nor repositories designed to enforce meta-rights were known prior to the '280 patent.

With respect to Google's arguments, Google contends that the invention consists of nothing more than known concepts implemented on generic hardware. (Paper 1 at 16–20.) Google further argues that the claimed “repository,” “state variable,” and “rights language” concepts are disclosed in the prior art '012 patent. (*Id.* at 18.) Google then purports to address the claims as whole, restating the steps of the claim in shorthand as: “obtaining the rights, determining if the consumer is entitled to the rights and then exercising the rights if allowed.” (*Id.* at 19.) According to Google, because the rights “are nothing more than digital data,” the steps recite “a well-known process” practiced on known computing hardware. (*Id.* at 19-20.)

Not only does this analysis address an overly-simplified version of claim 1, it utterly ignores the use of meta-rights as implemented in combination with a

repository and specific types of state variables as recited in the claims. The Board has denied CBM review based on similar inadequate showings. *See e.g. Epsilon Data Management, LLC*, CBM2014-00017, Paper 21 at 8, 9 (PTAB April 22, 2014)(denying CBM review where Petitioner argued that claims used “generic software and hardware” but failed to address novelty of claims as a whole: “Although Petitioner argues that providing proof of delivery was known, and use of digital signatures was known . . . that does not mean, necessarily, that the use of the specific steps in independent claims 1, 7, and 14 are not novel or unobvious.”); *see also E*Trade Financial Corp.*, CBM2014-00124, Paper 15 at 6-7 (PTAB October 30, 2014)(finding claims technological and denying CBM review despite argument that patent claimed only known hardware elements); *Motorola Mobility, LLC, v. Intellectual Ventures I, LLC*, CBM2014-00084, Paper 18 at 7 (PTAB August 6, 2014)(finding claims technological and denying CBM review where petitioner failed to fully address the actual claim limitations). These decisions make clear that merely because a method is computer-implemented does not preclude it from qualifying as a technological invention.

Google also mischaracterizes the claimed method as a “business problem with a business solution” and incorrectly argues that the method is not a technological solution because it “can be accomplished by a human with pencil and paper.” (Paper 1 at 21-22.) These arguments lack merit because they fail to

address the full limitations of the claims, including the recitation of a repository, which by the Board’s construction is “a trusted system which maintains physical, communications, and behavioral integrity, and support usage rights.” (Paper 9 at 21.) A human is quite the opposite of a trusted system. That is why DRM systems are needed in the first place. A human could not perform the computer functions of a repository manually.

In summary, the ‘280 patent addresses a technical problem – the lack of optimal level of control over the creation and transfer of rights to content in complex distribution networks. The claims of the ‘280 patent recite a technical solution to that problem – the use of novel meta-rights enforceable by a repository to allow downstream entities to create new rights. Because the ‘280 claims recite novel and unobvious technological features, the ‘280 patent claims are ineligible for CBM review for this additional reason.

V. GOOGLE HAS NOT PROVEN THAT THE ‘280 CLAIMS ARE ANTICIPATED BY STEFIK

Anticipation requires that each and every element of the claimed invention be disclosed in a single prior art reference or embodied in a single prior art device or practice. *Minnesota Min. & Mfg. Co. v. Johnson & Johnson Orthopaedics Inc.*, 976 F.2d 1559, 1565 (Fed. Cir. 1992). The elements must either be inherent or disclosed expressly and must be arranged as in the claim. *Id.*; *Carella v. Starlight Archery & Pro Line Co.*, 804 F.2d 135, 138 (Fed. Cir. 1986). “Inherency requires

that ‘the prior art *necessarily* functions in accordance with, or includes, the claimed limitations, it anticipates.’” *Sony Corp. of America v. Network-1 Security Solutions, Inc.*, IPR2013-00092, Paper 21 at 25 (May 24, 2013)(emphasis in original)(citing *MEHL/Biophile Int’l Corp. v. Milgraum*, 192 F.3d 1362, 1365 (Fed. Cir. 1999)).

A. Stefik’s DRM Approach Manages Only Usage Rights

The Stefik patent is described and distinguished in the background section of the ‘280 patent. (Ex. 1001 at 2:9–48.) It does not anticipate independent claim 1 or dependent claims 5 or 11 of the ‘280 patent.

Stefik generally relates to a digital content control and distribution system utilizing usage rights and repositories. (Ex. 1002 at Abstract.) The Stefik patent explains that “usage rights define how the digital work may be used or further distributed by a possessor of the digital work.” (*Id.* at 4:6–8.) Stefik explains that a content creator may determine appropriate usage rights and fees to be associated with the digital work and enforceable by a repository. (*Id.* at 7:7–30.) Thus, Stefik’s usage rights “are used to determine what transactions can be successfully carried out for a digital work” (*Id.* at 18:56–60.)

Stefik discloses a usage rights language for defining rights associated with digital works. A typical right statement may indicate, for example, whether the digital work can be copied, when and how it can be used, and what fees are to be

charged for the use. (*Id.* at 18:54-63.) Figure 15 of Stefik illustrates grammar elements of the disclosed usage rights language. Stefik explains that the usage rights statement for a digital work may include a “Next-Set-of-Rights” (“NSOR”) parameter. (*See, e.g., id.* at 20:47–58.) When a digital work is copied, transferred or loaned, the next set of rights is automatically associated with the transported copy. (*Id.* at 11:52–55.)

Stefik’s system may implement a NSOR parameter to control the usage rights of a transported copy or the remaining rights of the sender’s copy:

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.

(*Id.* at 20:50–57.)

Figure 18 illustrates common usage rights transaction steps according to Stefik’s scheme. (*Id.* at 32:18-19 and Fig. 18.) The requesting repository performs certain general tests, such as checking if the requestor has a proper authorization certification to install a digital work. (*Id.* at 32:26-35.) The server repository then verifies if the digital work has the usage rights corresponding to the requested transaction. (*Id.* at 32:39-41.) The server also checks any conditions associated

with the usage rights, such as time based conditions, security conditions imposed on the requesting repository, copy count conditions, etc. (*Id.* at 32:43-33:9.) If the conditions are satisfied, the server performs the usage transaction steps (e.g., transmitting a copy of the digital work) and closing steps involving updating state variables and initiating billing transactions. (*Id.* at 33:48-59.)

Stefik discusses the NSOR field in connection with copy, transfer, loan, backup, restore, extract and embed usage rights transactions. (*Id.* at 35:59-37:49; 38:65-40:14; 41:23-42:14.) Each of these usage rights transactions results in the server repository transmitting the content of the digital work to the requestor repository, followed by additional actions performed on the content by the requestor repository. (*Id.* at 36:7-19; 36:36-45; 37:5-11; 39:28-38; 40:5-11; 41:39-49; 42:3-11.)

B. Stefik Lacks Several Limitations Of The ‘280 Claims

1. Stefik Does Not Disclose: “a meta-right specifying a right that can be created when the meta-right is exercised”

The Petition first alleges that Stefik teaches the use of “meta-rights” in the form of a NSOR (Paper 1 at 64), but then gives the usage right of “loan” as an example of a meta-right. (*Id.*: “[i]n the example discussed above, the meta-right is ‘Loan’.”) Dr. Goldberg also makes inconsistent assertions about what he believes constitutes a meta-right in Stefik. ¶72 of his declaration states that a meta-right is “the grammar element ‘Next-Set-of-Rights’” (Ex. 1014.) The same paragraph

states that “the meta-right is ‘Loan,” which in the prior ¶71 Dr. Goldberg describes as a usage right. Dr. Goldberg clarified at deposition his opinion that the loan, copy and transfer rights are usage rights. (Ex. 2010 at 24:12-25:11.) He also clarified that he does not contend that “loan” is itself a meta-right. Rather, he asserts that the NSOR parameter encapsulated with the loan usage right is the meta-right. (*Id.* at 37:7-21.)

The Board understood Google to be equating the NSOR parameter to the meta-right in the sense that it determines the rights associated with a copied digital work after it has been transported. (Paper 9 at 34.) For completeness, however, CG first responds to any remaining argument that the copy, transfer or loan usage rights correspond to meta-rights under the ‘280 patent. It is undisputed that all other rights disclosed in Stefik as including a NSOR parameter are also usage rights, and that the NSOR parameter only appears within grammar defining one of these usage rights. (Ex. 1002 at Fig. 15.) Dr. Goldberg confirmed at deposition that the NSOR parameter is part of the data that defines the encapsulating copy, transfer or loan usage right. (Ex. 2010 at 25:12-22.)

These transport rights do not meet the Board’s construction of meta-right as “a right that one has to generate, manipulate, modify, dispose of or otherwise derive another right.” The transport rights each specifically name a right to copy, to transfer, or to loan a digital item. They do not name a right to “generate,

manipulate, modify, dispose, of or otherwise derive another right.” When exercising the transport right, after the transport operation is performed, the NSOR parameter is interpreted in proper context and unconditionally applied to the result of the transport operation. Applying the NSOR parameter to a transported object is just one of many consequences of exercising a transport right. The purpose and function of the transport right itself is not a right “that one has to generate, manipulate, modify, dispose of or otherwise derive another right.” (Ex. 2009 at ¶77.)

Nor do the transport rights correspond to meta-rights under the CG’s broadest reasonable construction of the term. The transport rights are usage rights and exercising the transport rights results in action to content. (*Id.* at ¶79.)

The NSOR parameter of the encapsulating usage right in Stefik also does not disclose a “meta-right” as recited in the claims. This is true under both the Board’s construction of meta-right and under the more precise construction advocated by CG. (*Id.* at ¶68.)

As CG explained in its Preliminary Response, the NSOR parameter is not an exercisable right. The Board dismissed that argument as being premised on a construction of meta-right that it did not adopt. However, the Board’s construction also requires a meta-right to be a right that one has to do something (Paper 9 at 17, “Meta-rights are the rights that one has to generate, manipulate, modify, dispose of

or otherwise derive other rights.”). Claim 1 itself makes clear that a meta-right specifies a right that can be created “when the meta-right is exercised.” (Ex. 1001 at Cl. 1.)

As the Martin declaration explains, the NSOR parameter list a set of rights, but is not itself a rights construct that can be exercised. The NSOR parameter is never exercised. Instead, the encapsulating usage right is exercised, and during exercise of the usage right Stefik’s system consults the NSOR parameter to populate the next set of rights for that post-operation content. (Ex. 2009 at ¶68.)

Stefik indicates that when the NSOR parameter is absent, rights are still associated with the next copy:

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.

(Ex. 1002 at 20: 50-53.) This confirms that that any rights creation in Stefik is performed by exercising the enclosing usage right, not the enclosed NSOR parameter. The NSOR parameter is optional, and, even without it, rights are still created for the transferred digital work in Stefik’s paradigm.

Google and its expert carefully avoided asserting that NSOR parameter is an exercisable right. Instead, they consistently point to the exercise of the usage right encapsulating the NSOR parameter. (*See e.g.* Paper 1 at 68, citing Ex. 1014 at ¶79, “The sending repository will then exercise the meta-right by transmitting to the

requesting repository a copy of the work with rights as specified by the ‘Next-Set-Of-Rights.’”) Dr. Goldberg agreed in deposition that the rights specified by the NSOR parameter are not provided to the recipient without exercising the associated loan, copy, or transfer usage right. (Ex. 2010 at 37:23-38:10.) He also admits that Stefik does not disclose a meta-right that can be exercised independently of the exercise of a usage right. (*Id.* at 53:11-24 and 54:5-15.)

As the Martin declaration explains more fully, an NSOR parameter cannot even be interpreted as a separate right all by itself. (Ex. 2009 at ¶¶70-73.) The NSOR parameter is interpreted differently when it appears within a Next-Copy-Rights specification than it does within a Remaining-Rights specification. If the NSOR parameter in the Next-Copy-Rights part of a loan, copy, or transfer is unspecified, then the resulting set of rights consists of the set of rights held by the originator of the loan, copy, or transfer. (*Id.* at ¶71.) Thus, to interpret the NSOR parameter, the system must consult the enclosing loan, copy, or transfer usage right. However, when the NSOR parameter is unspecified within Remaining-Rights (which is used to describe the rights that remain with the originator of a loan, copy, or transfer after the transport occurs), then the resulting set of rights is empty. (*Id.* at ¶72.) Stefik also teaches that if all copies of a work are loaned out, the server repository determines the set of rights by computing the intersection of the remaining rights specified across all versions of the loan right. Thus, to

interpret the NSOR parameter correctly, the system must in general inspect all loan usage rights, even those other than the loan right being exercised. (*Id.*)

A person of ordinary skill in the art would therefore understand from Stefik’s entire disclosure that a NSOR element is merely a parameter describing aspects of a procedure used to compute a set of rights and is not itself a right that one has or that can be exercised to generate, manipulate, modify, dispose of or otherwise derive another right. (*Id.* at ¶73.)

The Petition represents that Stefik teaches that NSOR “is a category of rights involving the making of persistent, usable copies of the digital work on other repositories” (Paper 1 at 64.) That is not accurate. The quoted description in Stefik (Ex. 1002 at 20:46–51) refers to the possible rights under the category of “transport-code,” which are limited to “copy,” “transfer,” and “loan.” The NSOR in the cited section is a parameter specified within those usage rights that influences how rights are carried forward when one of these usage rights is exercised. The NSOR itself is not among the “category of rights,” and Stefik does not teach that the NSOR parameter is itself an exercisable right. (Ex. 2009 at ¶74.)

While the foregoing disposes of Google’s anticipation theory based on NSOR under the Board’s construction of meta-right, the distinctions are even more pronounced under a construction that properly clarifies that a meta-right is not itself a usage right because exercising a meta-right does not result in action to

content. Google and its expert concede that the NSOR parameter is part of the data defining a usage right. Because the NSOR parameter is part of a usage right, it does not correspond to a meta-right, as properly construed, for the additional reason that it is not a right separate from a usage right (i.e., a right that is not itself a usage right). As mentioned, Google’s anticipation theory also equates the exercise of the alleged NSOR parameter with the transfer of the digital content according to the encapsulating usage right. The transfer of digital content necessarily results in the corresponding action to content. Therefore, under CG’s narrower construction of meta-right, Stefik’s NSOR parameters do not correspond to, and are distinct from, the concept of a meta-right for these additional reasons. (*Id.* at ¶75.)

2. Stefik Does Not Disclose: “determining, by a repository, whether the rights consumer is entitled to the right specified by the meta-right”

The aspect of the ‘280 invention described in this claim limitation requires a repository to check a recipient’s entitlement to receive a specific right before exercising a meta-right to create the specified right. Google alleges that this limitation is shown by a repository checking whether all conditions of the usage right are satisfied before permitting access to content. (Paper 1 at 65–68.) However, checking conditions of a usage right is distinct from determining

whether a rights consumer is entitled to “rights specified by the meta-right” before exercising the meta-right to create the right.

The Board characterized CG’s preliminary argument as emphasizing that Stefik teaches away from the recited “determining” step, which the Board deemed irrelevant to anticipation. (Paper 9 at 36-37.) However, CG’s Preliminary Response asserted and demonstrated that Stefik contains no disclosure relevant to checking whether a consumer is entitled to receive a right before generating the right (Paper 8 at 73-74), which is a complete answer to anticipation.

Google asserts that “[t]he rights associated with the copy and specified by the ‘Next-Set-Of-Rights’ are the created rights specified by the meta-right.” (Paper 1 at 68, citing Ex. 1014 at ¶79.) But it does not point to any description in Stefik of a repository evaluating whether the recipient is entitled to receive the rights identified in an NSOR parameter.

The Petition cites the loan operation as an example. (Paper 1 at 66.) Stefik does not disclose that during a loan transaction, the rights identified by the NSOR parameter of the loan usage right are evaluated against any parameters reflecting the recipient’s entitlement to those rights. (*See* Ex. 1002 at 36:54–37:49.) Instead, the rights identified by processing the NSOR parameter automatically propagate with the transferred copy when all the conditions of a usage right are met and the usage right is exercised. (*Id.* at 37:5–7; see also Ex. 2009 at ¶82.)

Google also emphasizes Stefik’s Figure 1, stating that when Repository 2 (requesting repository) requests access from Repository 1 (server repository), “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.” (Paper 1 at 65.) Stefik goes on to explain that “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 obtain a copy* of the digital work. 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.” (Ex. 1002 at 7:19-26; emphasis added.) This also shows that the server repository receiving the request simply checks to see whether a matching usage right (such as “print” or “copy”) is available for the content. These disclosures of a server repository checking its own usage rights to determine if it can perform the requested usage rights transaction do not teach checking the requestor’s entitlement to receive the rights specified by a meta-right. (Ex. 2009 at ¶83.)

Google also gives the example of server Repository 1 that has the “loan” right also checking all conditions of the loan right, such as whether copies are available and fees have been paid. (Paper 1 at 66-67.). As the Martin declaration explains, the example involves a set of five usage rights attached to a piece of content, and four instances of the NSOR parameter. (Ex. 2009 at ¶¶84, 85.)

According to Google and Dr. Goldberg, when attempting to exercise the first loan right, Repository 1 (the server repository currently holding the content) determines that Repository 2 is entitled to the digital work by checking whether a \$10 fee has been paid by Repository 2. That interpretation is incorrect and unsupportable. The disclosed loan usage right says that Account-ID-567 should be paid \$10, but it does not specify who must pay the fee. The \$10 fee is attached to the loan usage right as a whole; it is not specified within the NSOR parameter that is used to propagate rights for the loaned copy. (Ex. 2009 at ¶86.)

The second loan right illustrated, however, specifies an alternate version in which the loaned copy may only be played when a 1¢ per minute fee is assessed. This is the only mechanism disclosed in Stefik for requiring a loan recipient to pay a fee. However, the fee is assessed *after* the loaned copy is transferred. Google’s meta-rights theory holds that the NSOR parameter is exercised when the loan usage right is exercised to transfer the loaned copy to the requesting repository. But the server Repository 1 exercising the loan does not consider this fee when deciding whether the loan right may be exercised. Thus this post-loan fee cannot satisfy the limitation of “determining, by a repository, whether the rights consumer is entitled to the right specified by the meta-right.” According to the claim, the determination must occur before the meta-right is exercised. (*Id.* at ¶¶86, 87.)

Given the existence of the loan (5) mechanism used to assess fees from a loan recipient (which does not satisfy the *determining* step), when considering the loan (4), a person of ordinary skill in the art would understand that the server repository is ultimately responsible for the fee. Stefik does not teach “determining” by the server repository whether the recipient repository has paid a fee. Even if one assumes that Stefik suggests that fee conditions may relate to the requesting repository, these are conditions to be met in order for the server repository to exercise a usage right. They are not conditions checked to determine whether the rights consumer is entitled to receive rights described in the NSOR field. (*Id.* at ¶87.) Dr. Goldberg conceded at deposition that the conditions checked are conditions of the loan right itself. (Ex. 2010 at 62:11-63:19.) Thus, this pre-condition loan fee of the first illustrated loan usage right also does not satisfy the limitation of “determining, by a repository, whether the rights consumer is entitled to the right specified by the meta-right.” (Ex. 2009 at ¶87.)

In fact, in describing the loan transaction, Stefik does not indicate that the rights specified by the NSOR grammar element of the loan usage right are evaluated against *any* parameters reflecting the recipient’s entitlement to those specified rights. (Ex. 1002 at 36:54–37:49.) Stefik’s procedure for deciding whether the loan rights may be exercised is independent of the contents of NSOR field. (Ex. 2009 at ¶88.) Dr. Goldberg agreed at deposition that rights specified by

the NSOR parameter to remain with the digital work are automatically associated with the transferred copy of the digital work. (Ex. 2010 at 70:8-15.) He could not identify any disclosure in Stefik of a repository checking the right in the NSOR parameter to determine if the recipient repository is entitled to receive it. (*Id.* at 70:16-71:18.)

Google also cites passages of Stefik discussing security conditions required for a repository to participate in a transaction. (Paper 1 at 67-68.) However, these conditions determine if a repository has adequate security to participate in the system when exercising the associated usage right. Enforcing such conditions does not constitute a mechanism for checking whether a rights consumer is entitled to receive a right specified in a meta-right before exercising the meta-right to create a new right. (Ex. 2009 at ¶89.) Stefik’s decision making procedure for performing a transaction is completely independent of whatever rights are specified in the NSOR fields that Dr. Goldberg contends contain the “right specified by the meta-right.” (*Id.* at ¶90.) Therefore, Stefik cannot be fairly characterized as teaching “determining” whether any entity is “entitled” to those NSOR rights.

3. Stefik Does Not Disclose: “exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right”

Because Stefik does not disclose “meta-rights” or the “determining” step, it necessarily does not disclose the “exercising” step. Google contends that when a

request is made for a loan or copy of a digital work, “the sending repository will perform a number of general tests to confirm that requirements imposed on a digital work are met. (Paper 1 at 68, citing Ex. 1002 at 32:22-24.) That passage relates to the initial general tests shown as box 1801 Figure 18. Stefik makes clear that these “are tests on usage rights” that are performed “prior to initiating a usage transaction.” (*Id.* at 32:23-30.) Here again, checking general security conditions does not disclose checking whether a recipient is entitled to receive a right specified in meta-right, and then exercising the meta-right to create the specified right if the consumer’s entitlement to the specified right is verified. Checking these general security conditions is independent of the rights included within those NSOR parameters that Google contends contain the “right specified by the meta-right.” (Ex. 2009 at ¶91.)

Google then asserts that Stefik’s server repository exercises the meta-right by transmitting a copy of the work with rights as specified by the “Next-Set-Of-Rights.” The Board’s construction of meta-right is: “a right that one has to generate, manipulate, modify, dispose of or otherwise derive another right.” Transmitting a copy of the digital work is not exercising a right to generate, manipulate, modify, dispose of or derive another right. It is exercising a right to transfer the content of the digital work and associated data from one repository to another. (*Id.* at ¶92.)

The “exercising” step identified by Google also fails to disclose the exercise of a meta-right which when exercised does not result in action to content. Stefik simply discloses no mechanism for determining a consumer’s entitlement to a specified right and then exercising a meta-right to generate the new specified right without resulting actions to content. (*Id.* at ¶93.)

The Board should therefore reject the grounds of invalidity asserted against claim 1, and dependent claims 5 and 11, based on anticipation by Stefik.

VI. GOOGLE HAS NOT PROVEN THAT THE ‘280 CLAIMS ARE OBVIOUS BASED ON STEFIK AND THE KNOWLEDGE OF A PERSON OF ORDINARY SKILL IN THE ART

Under 35 U.S.C. § 103, Google must prove that the claimed subject matter would have been obvious to a person of ordinary skill in the art at the time of the invention. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The legal conclusion of obviousness is resolved on the basis of underlying factual determinations, including the scope and content of the prior art, differences between the prior art and the claims and the level of ordinary skill in the pertinent art, as well as consider any objective indicia of nonobviousness. *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17 (1966). These underlying factual determinations “must be considered by the trier of fact” in an obviousness analysis. *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 546 (Fed. Cir. 1998).

“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). The reason for this is that,

[w]hile the Supreme Court made clear that a mechanical application of the teaching-suggestion-motivation test, requiring an explicit teaching in the prior art, is inappropriate, “[w]e must still be careful not to allow hindsight reconstruction of references to reach the claimed invention without any explanation as to how or why the references would be combined to produce the claimed invention.”

Kinetic Concepts, Inc. v. Smith & Nephew, Inc., 688 F.3d 1342, 1368 (Fed. Cir. 2012)(quoting *Innogenetics, N.V. v. Abbott Labs.*, 512 F.3d 1363, 1374 n.3 (Fed. Cir. 2008)); *see also KSR*, 550 U.S. at 421 (“A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.”); *Graham*, 383 U.S. at 36 (warning against a “temptation to read into the prior art the teachings of the invention in issue” and instructing courts to “guard against slipping into use of hindsight” (citation omitted)). Thus, “[c]are must be taken to avoid hindsight reconstruction by using ‘the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit.’” *Grain Processing Corp. v. Am. Maize-Prods. Co.*, 840 F.2d 902,

907 (Fed. Cir. 1988) (quoting *Orthopedic Equip. Co. v. United States*, 702 F.2d 1005, 1012 (Fed. Cir. 1983)).

Proper analysis under § 103 also requires proof of some suggestion or motivation to one skilled in the art that they should make the claimed invention and that they would have a reasonable expectation of success in so making. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). To determine whether there was a reason to combine known elements in the manner claimed, it is often necessary to “look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art.” *KSR*, 550 U.S. at 418. A reference must be considered for all that it teaches, disclosures that diverge and teach away from the invention at hand as well as disclosures that point toward and teach the invention. *In re Dow Chem. Co.*, 837 F.2d 469, 473 (Fed. Cir. 1988). The determination of the motivation to combine references allows recourse to logic, judgment, and common sense, but any such motivation to combine references must still avoid the improper application of hindsight or reliance on the patentee’s disclosure of his invention as found in the patent specification, drawings, and claims. *In re Kahn*, 441 F.3d at 986, 987.

Google argues that it would have been obvious to modify Stefik such that the NSOR parameter is exercisable and/or transferable independent of copying,

loaning or transferring the underlying digital work with which the transport usage right is associated. (Paper 1 at 75.) This appears directed to the scenario where the claims are interpreted per the district court’s construction to require a meta-right that it not itself a usage right and does not result in action to content when exercised.

According to this single paragraph argument, obviousness is shown because there are only two ways to create, exercise, and transfer meta-rights – at the same time as the underlying digital work is copied or transferred, or at a different time or in a different action. (Pet. at 76.) Google further contends that a person skilled in the art could write the code to “require the meta-right transfer at the same time or different time from copying or transfer of the underlying work.” (*Id.*) The Petition cites to ¶¶96-99 of the Goldberg declaration as support, which merely repeats the same assertions and provides no additional support. (Ex. 1014.)

Google’s argument falls well short of proving that the challenged claims are invalid for obviousness. To begin with, it addresses only one difference between the claims as a whole and Stefik. As explained above, Stefik does not disclose a “meta-right” because, under any reasonable construction of that term, a meta-right is fundamentally an exercisable right. Stefik’s NSOR parameter is not an independently exercisable right. It is a parameter of a usage right and is interpreted and processed along with other parameters during the exercise of the usage right.

Stefik does not describe any type of right other than usage rights. Google’s speculation that Stefik could be modified, such that the NSOR parameter is processed at a different time or in a different action than when the transfer or copying of the underlying digital content, fails to address that Stefik does not disclose a NSOR parameter that exists or functions as a right that can be exercised on its own. As the Martin declaration explains, the NSOR parameter can only be interpreted as part and parcel of a usage right, and its processing involves determining whether it is within a Next-Copy-Rights or Remaining-Rights field and analyzing the various usage rights originally associated with the digital work to determine the new set of rights upon transfer of the digital work. (Ex. 2009 at ¶¶70-73, 104.) Rights can still be created for the transferred copy of a digital work when the Next-Copy-Rights parameter is unspecified. This is because the process being executed is the exercise of the usage right not the exercise of a separate NSOR right. The basic idea of the NSOR parameter is contrary to, and teaches away from, the notion of a separately transferable and exercisable meta-right for creating new rights independent of the exercise of a usage right.

Google has not explained how its proposed modification would result in practicing other aspects of the claims not disclosed by Stefik. Specifically, its theory of obviousness fails to address the differences between the ’280 claims and Stefik rooted in the limitation “determining, by a repository, whether the rights

consumer is entitled to the right specified by the meta-right” and the related limitation “exercising the meta-right to create the right specified by the meta-right if the consumer is entitled to the right specified by the meta-right.” In *Stefik*, no entity evaluates an NSOR parameter to determine whether a recipient is entitled to receive that set of rights. Google makes no attempt to explain how the NSOR may be modified to function separately from a usage right to create a new right according to the “determining” and “exercising” limitations of claim 1. Modifying *Stefik* such that the NSOR parameter is processed at a different time or in a different action from the copying or transfer of the digital content would not result in a method that practices either of these two limitations. (Ex. 2009 at ¶102.)

Even if the modification proposed by Google would result in the claimed subject matter (it would not), the Petition provides no clearly articulated reasoning or persuasive evidence regarding why a person of ordinary skill in the art would have been motivated to modify *Stefik* in this way. Google’s reasoning that there are only two possibilities – a NSOR parameter must either be processed at the same time or at a different time than transfer of content associated with the usage right – essentially boils down to saying that since the possibilities are limited, someone would have eventually arrived at the modified approach. That proves nothing about how a person of ordinary skill would have been led to the modified approach, or why they would have chosen it. Google provides no evidence of a

motivation: not from the teachings of Stefik or other prior art; not from the demands known to the design community or present in the marketplace, not based on background knowledge, not from any other source. The record also contains no evidence that a person of ordinary skill would have identified an opportunity to improve aspects of Stefik's scheme, would have identified the advantages gained by modifying Stefik, or would have been driven to modify Stefik in the manner now alleged so as to arrive at the same solution claimed. (*See id.* at ¶104.)

Because the NSOR parameter only works in the context of a usage right, and does not exist or function outside of a usage right, modifying Stefik to provide a meta-right separate from usage rights exercisable to create a new right without acting on content is contrary to the disclosure of the NSOR parameter. (*Id.* at ¶103.) In Stefik, the NSOR is defined by the provider of the associated usage right to control the rights received by a downstream user. Namely, the NSOR functions to ensure that, if the usage right is exercised, the transferred content can only have the rights specified by the original provider. Therefore, a person of ordinary skill in the art would not be motivated to separate out the functions of NSOR from a transfer usage right, as the NSOR is essentially enforcing a requirement for that usage right. Google provides no explanation as to how this function of the NSOR may be preserved if a NSOR is specified and exercised separately from the usage right it is designed to control. (*Id.*)

Google’s contention that a person skilled in the art would know how to write software code to “require the meta-right transfer at the same time or different time from copying or transfer of the underlying work” (Paper 1 at 76) misses the point. As a preliminary matter, ContentGuard is not saying that meta-rights must be *transferred* without acting on content but, consistent with the specification of the ’280 patent, that meta-rights must be *exercised* independent of an action to content. And even ignoring Google’s failure to address the issues, the assertion that the disclosure of a NSOR parameter could be modified is at most an assertion that a modification is possible, not a reason why it would have been implemented as the solution to the problems addressed by the ’280 patent. *See Microsoft Corp. v. Secure Web Conference Corp.*, IPR2014-00745, Paper 12 at 15-16 (PTAB Sept. 29, 2014). Google also vaguely alludes to the “common sense” of persons ordinary skill (Paper 1 at 76), but that too is unhelpful to show why one skilled in the art would have modified Stefik to arrive at the claimed invention. *See Zetec Inc. v. Westinghouse Elec. Co. LLC*, IPR2014-00384, Paper 10 at 13 (PTAB July 23, 2014).

The ’280 claims invoke the novel concept of meta-rights to improve the flexibility and effectiveness of trusted repository-based DRM systems in complex distribution networks. The ’280 patent teaches decoupling functions associated with creating new rights under the control of content owner specifications (one

application of “meta-rights”) from functions associated with distributing and viewing content in accordance with usage rights. The claims recite a specific method of using meta-rights in a trusted repository system to provide a mechanism for specifying new rights that can be created independent of the distributing and viewing of content under the control of usage rights, determining whether a consumer is entitled to a specified right, and creating the new right with associated state variables if the consumer is entitled to receive it. Google has not put forth any evidence to establish that a person of ordinary skill would have identified the opportunity to improve prior DRM systems in the manner that the claims achieve or would have modified Stefik to arrive at the claimed solution. Google’s suggestion of modifying Stefik to transfer a meta-right and digital work at different times would not result in the subject matter of the challenged claims, is based entirely on hindsight, is conclusory, and is not supported by any evidence of a motivation. Google’s conclusory argument is insufficient to prove obviousness.

VII. CONCLUSION

For the foregoing reasons, the Board should dismiss this proceeding on the basis that the ‘280 patent is not eligible for CBM patent review. If trial proceeds to decision on the merits, the Board should uphold the validity of claims 1, 5 and 11 over Stefik alone, and in combination with the knowledge of a person of ordinary skill in the art.

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §42.6(e), the undersigned hereby certifies that a true copy of the foregoing RESPONSE OF PATENT OWNER is being served on counsel for petitioners.

Respectfully submitted,

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC. and APPLE INC.,
Petitioners

v.

CONTENTGUARD HOLDINGS, INC.
Patent Owner

Case CBM 2015-00040¹

U.S. Patent 7,774,280

Filed October 4, 2004

Issued August 10, 2010

Title: SYSTEM AND METHOD FOR MANAGING TRANSFER OF
RIGHTS USING SHARED STATE VARIABLES

Attorney Docket No. 20318-134361

Customer No: 22242

PATENT OWNER'S CONTINGENT MOTION TO AMEND UNDER
37 C.F.R. § 42.121

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Patent Trial and Appeal Board
United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450

¹ Case CBM2015-00160 has been joined with this proceeding.

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I. INTRODUCTION

This contingent motion to amend is submitted in compliance with 37 C.F.R. §42.121. If original claim 1 of U.S. Patent No. 7,774,280 (“the ‘280 patent”) is found unpatentable, the Board is requested to cancel independent claim 1 and replace it with proposed substitute claim 37. *See* 37 C.F.R. §42.22(a)(2); 35 U.S.C. § 316(d). Proposed substitute independent claim 37 amends original independent claim 1 to expressly incorporate the meaning of the term “meta-right” as it would be interpreted in district court litigation. Claims 2-11 depend from original claim 1, would be unchanged in scope, and would depend from proposed substitute claim 37. *See Toyota Motor Corp. v. American Vehicular Sciences LLC*, IPR2013-0419, Paper 32 at 2 (PTAB Mar. 7, 2014)(when independent claim cancelled and replaced with substitute claim, an unchanged dependent claim retains its same scope and need not be rewritten as substitute claim); *ZTE Corporation et al. v. ContentGuard Holdings Inc.*, IPR2013-00136, Paper 33 at 3-4 (PTAB Nov. 7, 2013)(not necessary to present unchanged dependent claims as substitute claims when substituting for independent claim).

ContentGuard has satisfied the conference requirement of 37 C.F.R. § 42.221(a) for this motion. (*See* Paper 13.)

II. CLAIM LISTING

The following is a complete listing of the proposed claim amendment with a

correlation of the substitute claim to the original claim. *See* C.F.R. ¶42.121(b).

1. (Cancelled)

2-11. (Unchanged claims to depend from proposed substitute claim 37)

37. (Proposed substitute for original claim 1) A computer-implemented method for transferring rights adapted to be associated with items from a rights supplier to a rights consumer, the method comprising:

obtaining a set of rights associated with an item of content, the set of rights including a meta-right specifying a usage right or another meta-right that can be created when the meta-right is exercised, wherein the meta-right is provided in digital form and is enforceable by a repository;

determining, by a repository, whether the rights consumer is entitled to the right specified by the meta-right; and

exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right, wherein the created right includes at least one state variable based on the set of rights and used for determining a state of the created right, and wherein the meta-right is not itself a usage right because exercising the meta-right does not result in action to the content.

III. SCOPE OF THE SUBSTITUTE CLAIM

The proposed substitute claim presents one substitute claim for the cancelled original claim, satisfying the general presumption that “only one substitute claim would be needed to replace each challenged claim.” *See* 37 C.F.R. §42.121(a)(3).

The proposed substitute claim 37 is not broader than the original claim. Claim 37 includes all limitations of original independent claim 1 and additional clarifying language. The word “content” inserted in the first limitation makes explicit that items with which rights are associated are items of content. This is implicit in the claim as a whole in view of the patent specification, and is inserted for proper antecedent basis for the inserted phrase “does not result in action to the content.” The rewording of “a right” to read “a usage right or another meta-right” also does not change claim scope. The parties are in agreement that “right” would be understood as generic for usage right or meta-right. (Paper 1 at 30; Paper 8 at 33; Paper 9 at 14.) The language inserted in the last limitation conforms the meaning of “meta-right” to how the term has been interpreted by the U.S. District Court for the Eastern District of Texas in pending litigation involving Patent Owner and Petitioner. (Ex. 2001 at 106.) The proposed substitute claim therefore complies with 37 C.F.R. §42.121(ii).

IV. SUPPORT FOR THE SUBSTITUTE CLAIM

Support for the proposed substitute claim from the original disclosure of the patent and from each earlier-filed disclosure for which benefit of the earlier filing date is sought is provided below. *See* 37 C.F.R. §§42.121(b)(1)-(2).

Support for the substitute claim in the original application for the ‘280 patent, application No. 10/956,121, filed October 4, 2004 (Ex. 2011) can be found

in, e.g.: [0006](describing '012 patent for controlling usage rights, and incorporating '012 disclosure by reference); [0008](summarizing method of transferring rights using meta-rights); [0037]-[0038](explaining characteristics and functions of meta-rights); Fig. 2 and [0040]-[0042](describing meta-rights and usage rights in distribution network); Fig. 5 and [0049]-[0055](describing authorizing request to exercise meta-right, and exercising meta-right to create new right); Figs. 9-12 and [0065]-[0072](illustrating meta-rights specifying new right, determining recipient's entitlement, exercising meta-right, and state variables); [0044](explaining that meta-rights are not usage rights because exercising meta-right does not act on content; stating that repository of incorporated '012 patent is used to enforce meta-rights); [0046]-[0047](describing function of conditions and state variables); and [0057](describing determining recipient's entitlement to specified right and exercising meta-right to create new right).

The '121 application is a continuation-in-part of application No. 10/162,701, filed June 6, 2002. (Ex. 2012.) Support for the proposed substitute claim in the '701 parent application can be found in, e.g.: [0006](describing '012 patent system for controlling usage rights, and incorporating '012 disclosure by reference); [0008](summarizing method of transferring rights using meta-rights); [0028]-[0029](explaining characteristics and functions of meta-rights); Fig. 2 and [0031]-[0033](describing meta-rights and usage rights in distribution network);

[0035](explaining that meta-rights are different from usage rights because exercising meta-right does not act on content; stating that repository of incorporated '012 patent is used to enforce meta-rights); [0037]-[0038](describing function of conditions and state variables); and Fig. 5 and [0040]-[0046](describing authorizing request to exercise a meta-right, and exercising meta-right to create new right).

The '280 patent also claims priority to provisional application No. 60/331,624, filed November 11, 2001. (Ex. 2013.) Support for the proposed substitute claim in the '624 provisional application can be found in, e.g.: p. 1 (incorporating '012 disclosure by reference; describing characteristics and functions of meta-rights); pp. 2-3 (explaining that meta-rights are different from usage rights because exercising meta-right does not act on content; stating that repositories of incorporated '012 patent are used to enforce meta-rights); p. 3 flow chart (describing process of exercising meta-right, including authenticating recipient's entitlement to receive new right); p. 4 (describing meta-right conditions and state variables; illustrating license embodying a meta-right); p. 5 (describing components of system, including functions of Authorization, Meta-rights Manager and Rights Manager); p. 6-7 (describing authorization process for determining requestor's entitlement to right specified in meta-right); and p. 8 (describing exercise of meta-right).

V. CLAIM CONSTRUCTION

Constructions are provided for the terms “content” and usage right” of substitute claim 37, which were not in the original claim 1. *See* 37 C.F.R. §42.104(b)(3). These constructions reflect the broadest reasonable interpretation consistent with the specification.

One of ordinary skill in the art would understand that the term “content” means “the digital information (i.e. raw bits) representing a digital work.” The ‘280 specification incorporates by reference the disclosure of U.S. Patent No. 5,634,012 to Stefik (“Stefik ‘012”). (Ex. 1001 at 1:37-43.) The incorporated Stefik disclosure includes a Glossary, which defines “content” in that manner. (Ex. 1002 at 52:32-34.)

The district court construed “usage rights” to mean “indications that are attached, or treated as attached, to [a digital work / digital content / content / a digital document] and that indicate the manner in which the [digital work / digital content / content / digital document] may be used or distributed as well as any conditions on which use or distribution is premised.” (Ex. 2001 at 23–33, 106–08.) The construction is based on the ‘280 patent specification and the disclosure of the Stefik patents incorporated by reference. It reflects the broadest reasonable construction based on the entirety of the ‘280 patent disclosure.

VI. THE SUBSTITUTE CLAIM IS PATENTABLE

A. The Closest Known Prior Art

Google, Inc. (“Google”) filed a Petition for Covered Business Method Review under the Leahy-Smith America Invents Act (“AIA”) regarding claims of the ‘280 patent. (Paper 1.) On June 24, 2015, the Board entered a Decision instituting trial on claims 1, 5 and 11 for grounds of rejection based on anticipation under §102(b) by Stefik ‘012 and obviousness under §103(a) over the combination of Stefik ‘012 and the knowledge of one of ordinary skill in the art. (Paper 9 at 43.) Substitute independent claim 37 is patentable over the Stefik ‘012 reference.

On September 11, 2015, the Board entered a Decision instituting covered business method patent review in response to a Petition filed by Apple Inc. in CBM2015-00160. The Decision instituted CBM review of the same claims based on the same grounds instituted in this proceeding. The Decision further ordered that CBM2015-00160 be joined with this proceeding. (Paper 13.)

The original claim 1 of the ‘280 patent has been challenged in other petitions filed by Apple, Inc. before the Patent Trial & Appeal Board, designated Inter Partes Review Nos. IPR2015-00351, IPR2015-00352, IPR2015-00353 and IPR2015-00354. The primary prior art references asserted in those proceedings are: U.S. Patent Application Publication No. 2002/0077984 to Ireton (“Ireton”)(Ex. 2014); U.S. Patent No. 6,327,652 to England et al. (“England”)(Ex. 2015); U.S. Patent No. 6,389,538 to Gruse et al. (“Gruse”)(Ex. 2016); and U.S. Patent No.

5,892,900 to Ginter et al. (“Ginter”)(Ex. 2017). The Board denied each petition as failing to show a reasonable likelihood that the Petitioner would prevail on any proposed rejections of claim 1. Google and Apple have asserted the above-mentioned references as well as U.S. Patent No. 5,260,999 to Wyman (“Wyman”)(Ex. 2018) against original claim 1 in the pending litigation.² CG considers these references to be the closest other known prior art references to proposed substitute claim 37. (Ex. 2009 at ¶¶109-111.) Substitute claim 37 is patentable over this additional prior art.

Patentability is supported by the declaration of David M. Martin Jr., Ph.D. With over 35 years of experience with computer software and a Ph.D. in Computer Science from Boston University, Dr. Martin is an expert in computer security and privacy and is highly qualified to address the digital rights management technology pertaining to the ‘280 patent. (Ex. 2009 at ¶¶ 7-13.)

B. The Level of Ordinary Skill in the Art

At the time of the ‘280 invention, the person of ordinary skill in the art would have had a bachelor’s degree in electrical engineering, computer science or a related

² U.S. Patent No. 5,629,980 to Stefik et al. has also been asserted in the litigation. It contains substantially the same disclosure as Stefik ‘012 and is therefore not separately addressed in this motion.

field with a few years (e.g., two years) of experience with digital content distribution and/or computer security. (Ex. 2009 at ¶16.) Such a person would have thought along the lines of conventional DRM systems, with ordinary creativity, and would have been constrained to operate in known DRM environments according to their own many complex interdependent components and methodologies due to the difficulty of modifying such systems without impacting fundamental principles of their operation. (*Id.* at ¶¶153-156.) There is no reason to believe that such a person would have perceived problems with existing DRM systems when operated in complex content distribution networks or would have been led to the solution offered by the ‘280 patent. (*Id.*)

C. No Reference Anticipates The Proposed Substitute Claim

1. Stefik ‘012 Does Not Anticipate

Proposed substitute claim 37 requires exercising a meta-right to create a new right, and expressly recites that the meta-right is not itself a usage right because exercising it does not result in action to content.

Stefik ‘012 represents a trusted repository DRM approach in which repositories enforce usage rights that control access to and the permitted manners of using digital content. (Ex. 2009 at ¶59.) Stefik explains that the usage rights statement for a digital work may include a “Next-Set-of-Rights” (“NSOR”) parameter. When a digital work is copied, transferred or loaned, the next set of

rights is automatically associated with the transported copy. (*Id.* at ¶¶60-61.) Each of these usage rights transactions results in the server repository transmitting the content of the digital work to the requestor repository, followed by additional actions performed on the content by the requestor repository. (*Id.* at ¶63.)

All rights disclosed in Stefik as including a NSOR parameter are usage rights, and the NSOR parameter only appears within grammar defining one of these usage rights. (*Id.* at ¶66.) The NSOR parameter list a set of rights, but is not itself a rights construct that can be independently exercised. The NSOR parameter is never exercised. Instead, the encapsulating usage right is exercised, and during exercise of the usage right Stefik’s system consults the NSOR parameter to populate the next set of rights for that post-operation content. (*Id.* at ¶¶68-73, 115.)

Stefik ‘012 does not disclose the step of “exercising the meta-right” of proposed claim 37, wherein the meta-right exercised is not itself a usage right and is exercised without resulting in action to the content. The NSOR parameter is part of the data defining a usage right, and the only way to perform the NSOR parameter’s instructions is to begin by exercising a usage right such as transfer, copy, or loan. The transfer of digital content necessarily results in the corresponding action to content. The NSOR parameter is not a right separate from a usage right (i.e., a right that is not itself a usage right), and it cannot be exercised

without resulting in action to the content. Therefore, the NSOR parameter of Stefik ‘012 does meet the requirements of the meta-right as recited in proposed substitute claim 37. (*Id.* at ¶¶75, 117.) The claim also distinguishes over Stefik ‘012’s disclosure of the encapsulating transfer, copy and loan rights, which are usage rights. Exercising these usage rights results in action to content. (*Id.* at ¶¶79, 117.)

Stefik ‘012 also fails to disclose the “determining” step of the proposed substitute claim. The NSOR parameter may identify rights that may be added to a transported copy of a digital work. Stefik ‘012 does not describe a mechanism for a repository to evaluate whether the recipient is entitled to receive the rights identified in an NSOR parameter. (*Id.* at ¶¶81-90, 118.) In Stefik ‘012, a server repository checks conditions of its own usage rights to determine if it can perform a requested transaction. (*Id.* at ¶83.) Stefik ‘012 also discusses checking security conditions to determine if a repository has adequate security to participate in the system when exercising the associated usage right. (*Id.* at ¶¶89, 118.) This does not disclose checking the requestor’s entitlement to receive the rights specified by the NSOR parameter. Stefik’s decision making procedure for performing a transaction is completely independent of whatever rights are specified in the NSOR field. (*Id.* at ¶88, 118.)

2. Ireton Does Not Anticipate

Ireton relates to a digital media server (“DMS”) that allows a consumer to

access a digital work at different locations by managing the transfers of the acquired usage rights between playback devices. In Ireton, a DMS first acquires user rights from a content provider that permits a number of working copies for a digital media. The DMS then transfers the acquired right to playback devices or other DMSs that request the use right, ensuring that the total number of copies on a customer's devices does not exceed the number of rights initially acquired by the DMS. (*Id.* at ¶¶122-123.)

Ireton does not anticipate the proposed substitute claim. (*Id.* at ¶124.) As the Board held in In IPR2015-00351 (Ex. 2019 at 16), Ireton's digital media servers do not correspond to the claimed repository having "behavioral integrity." Ireton discloses only a private key used by the digital media servers to access or decrypt digital files and their associated usage rights, but does not disclose using the private key to authenticate the source of software before permitting it to be installed in the digital media server. (Ex. 2009 at ¶124.)

A DMS of Ireton's system does not create new rights, but only exercises a usage right to copy and transfer while enforcing the associated conditions on the number of copies distributable. The right to distribute the content itself is a usage right permitting the DMS to make copies of the content and transfer the copies to other devices. When exercised, this distribution right necessarily acts on the content. Therefore, Ireton does not disclose a meta-right that is independent of a

usage right, specifies a right that can be created when the meta-right is exercised, and does not result in actions to the digital content when exercised. (*Id.* at ¶125.)

Ireton also does not disclose a repository performing the “determining” and “exercising” steps of the proposed amended claim 1. In Ireton, a “secure authenticated channel” can be used to distinguish between a communications endpoint being a system component or non-system component. But this relates to preventing intruders or other non-system components from receiving the data and is not a mechanism for determining whether the rights consumer is entitled to the potential new right specified by a meta-right. (*Id.* at ¶126.)

3. England Does Not Anticipate

England relates to loading and identifying a digital rights management operating system (DRMOS”). In England’s system, content providers download content only to subscriber computers that can prove that their operating systems will enforce the limitations the provider places on the content. A DRMOS must load on a subscriber client computer and execute only OS components that are authenticated with a digital signature as respecting digital rights. The disclosed DRMOS also identifies trusted applications and prevents non-trusted applications from gaining access to the content. (Ex. 2009 at ¶127.)

In the England system, a content provider downloads the content, an “access predicate” and a “license” to the DRMOS on a subscriber computer. The access

predicate specifies the properties an application must have to process the content, and may also specify applications allowed to process the content. The license restricts what kind of processing may be performed on the content. The DRMOS enforces the license. (*Id.* at ¶128.)

The proposed substitute claim 37 is not anticipated by England. (*Id.* at ¶129.) The Board held in IPR2015-00353 that England’s subscriber computers do not correspond to the claimed repository having “communications integrity.” According to the Board, England does not teach a mechanism for the subscriber computer running the DRMOS operating system to verify that content provider server computer is a trusted system. (Ex. 2021 at 17-18.) England also does not disclose the use of digital certificates or any other mechanism to provide communications integrity between the subscriber computer and the computer of a sublicensee. (Ex. 2009 at ¶129.) England’s DRMOS prevents non-trusted applications from accessing protected content but does not prevent them from being installed. Therefore, England’s subscriber computers also do not correspond to the claimed repository having “behavioral integrity.” (*Id.* at ¶130.)

England also does not disclose a meta-right specifying a right that can be created when the meta-right is exercised, and wherein the exercising of the meta-right does not result in actions to the content. England describes “sublicense rights” as rights permitting an application to share the content with other computers while

imposing restrictive rights on re-distributed content. The disclosed sublicense right is a usage right permitting a subscriber to transfer content to another device. The system passes a sublicense reflecting the further usage restrictions only when a subscriber exercises the usage right to share content, which necessarily involves action to the content (i.e., copying or otherwise transferring the content). And since the sublicense rights can only repeat or restrict the original usage rights established by the content provider, England does not disclose any mechanism for creating new rights. Therefore, England does not disclose a meta-right that is not a usage right, specifies a right that can be created when the meta-right is exercised, and that functions to create a new right without resulting actions to content. (*Id.* at ¶¶131-132.)

England also fails to disclose a repository performing the “determining” or the “exercising” steps of the proposed substitute claim. It describes how the subscriber may validate other client computers and share content with them via sublicense rights, but this does not involve a determination as to whether another client computer is entitled to receive a specific right associated with an item of content. England does not disclose any mechanism through which a repository determines a downstream party’s entitlement to receive a usage right specified by a meta-right before exercising the meta-right to generate the usage right. (*Id.* at ¶133.)

4. Gruse Does Not Anticipate

Gruse discloses a secure digital content electronic distribution system involving content providers, distributors, electronic digital content stores, a clearinghouse and end-user devices. Content providers and distributors may package content for further distribution. Electronic digital content stores market content to end users. A Clearinghouse provides licensing authorization and record keeping. End-user devices contain a player application compliant with the specifications of the secure digital content electronic distribution system. (*Id.* at ¶¶134-135.)

The content provider sets usage conditions for a digital work and transmits this data to authorized electronic digital content stores in a secure container. Gruse discloses a process whereby an electronic digital content store may become authorized to offer digital content of a provider. Once authorized via the clearinghouse, the store receives a digital certificate, along with the necessary tools for processing secure containers from the digital content label so that it may offer content for purchase by end-users. (*Id.* at ¶¶136-137.) The store may add usage conditions in the offer to end-users, but the store usage conditions are not permitted to invalidate the original conditions set by the content provider. (*Id.* at ¶139.)

Gruse does not anticipate proposed substitute claim 37. (*Id.* at ¶138.) In

IPR2015-00352, the Board held that the Gruse clearinghouse computer does not correspond to the claimed repository having “behavioral integrity.” (Ex. 2020 at 15-17.) Gruse’s digital certificates assigned by the clearinghouse do not function to assure that software is trusted before being installed in the clearinghouse. Gruse does not disclose that the electronic digital content stores, end-user devices, or any other components of the system possess behavioral integrity. (Ex. 2009 at ¶138.)

The disclosure of a content store having the right to add restrictions does not correspond to a meta-right that is exercisable to create new rights. In Gruse, rights are created by the content provider, and the content stores can only modify the conditions of usage rights specified by the content provider in a limited manner that does not invalidate the content provider’s restrictions. (*Id.* at ¶139.)

The end-user devices in Gruse may also receive a right from the electronic store that allows licensed secondary copies to be created. Copying as described in Gruse is the exercise of a usage right. Gruse’s copy right does not disclose a meta-right that is not itself a usage right and that is exercisable to create a new right in a process that does not result in action to content, as required by the amended claim. (*Id.* at ¶140.) Gruse also necessarily fails to disclose a system having a repository that performs the “determining” and “exercising” steps for creating a new right, as recited in the proposed amended claim 1. (*Id.* at ¶141.)

5. Ginter Does Not Anticipate

Ginter generally relates to secure transaction management and electronic rights protection in a virtual distribution environment in which digital content is packaged in secure containers for use by secure electronic appliances. The content cannot be accessed except as provided by the rules and controls of the container, which may specify what kinds of content usage are permitted, and what kinds are not. Rules and controls may specify “meters,” which keep track of events and handle reporting, and “budget processes,” which limit how much content usage is permitted. (*Id.* at ¶¶142-143.)

Ginter does not anticipate the proposed substitute claim. (*Id.* at ¶¶144.) In IPR2015-00354, the Board held that Ginter’s secure electronic appliances do not correspond to the claimed repository having “behavioral integrity.” (Ex. 2022 at 16-18.) Ginter does not disclose a rights operating system that authenticates the source of the software prior to installing it on the secure electronic appliances or any other component of Ginter’s architecture. Ginter therefore fails to satisfy the repository limitations of the proposed amended claim 1. (Ex. 2009 at ¶144.)

Ginter also fails to teach the “determining” or “exercising” steps of the proposed amended claim 1, let alone a system in which those steps are performed by a repository. There are points in Ginter’s distribution scheme at which some aspect of the user or its computer device is checked. These relate to the overall trustworthiness of the end user and his or her ability to receive “usage rights”

generally. For example, Ginter mentions checking an end user’s “credit, financial records, business agreements, and/or audit histories.” (Ex. 2017 at 169:27-57.) These properties relate to whether the consumer meets minimum criteria for continuing to participate in the system generally, not whether he or she is entitled to a specific usage right for an item of content. Ginter does not disclose a mechanism for making a determination of whether the rights consumer is entitled to a particular potential new right specified in a meta-right. (Ex. 2009 at ¶145.)

6. Wyman Does Not Anticipate

The Wyman patent discloses a license management system in which a software application, upon start-up, requests authorization from a license server. The license server checks a database of the licenses, called “product use authorizations.” If the requested use is permitted, a grant is returned to the requesting user node. (*Id.* at ¶¶146-148.)

Wyman does not anticipate proposed substitute claim 37. (*Id.* at ¶152.) It relates to a very different approach in which the digital assets themselves are programmed to account for license rights. (*Id.* at ¶149.) Wyman’s system does not utilize components that have any of the attributes of repositories, i.e., “a trusted system which maintains physical, communications, and behavioral integrity, and supports usage rights.” Without any repository, not only does Wyman require structuring the digital assets themselves to request and evaluate license data, it

appears that compliance with license rights is entirely optional in the Wyman system. (*Id.* at ¶¶149-150.)

Wyman is irrelevant to creating, transferring and enforcing meta-rights and usage rights in a trusted system. Wyman does not disclose a “meta-right . . . enforceable by a repository,” as required by the original language proposed substitute claim 1, or the other attributes of meta-rights clarified by the amended language. Wyman also fails to disclose the “determining” or “exercising” steps of the claim, whereby a repository determines whether the rights consumer is entitled to the right specified by the meta-right before exercising the meta-right to create the new specified right. (*Id.* at ¶¶151.)

D. The Proposed Substitute Claim Is Nonobvious Over the Prior Art

As the above discussion demonstrates, at the time of the invention of the ‘280 patent, numerous approaches had been proposed for controlling and restricting the use and distribution of digital works in networked computer environments. The management systems and methodologies disclosed in the prior art involve many complex interdependent components and procedures, each with their own unique utility, benefits and potential constraints. Stefik ‘012 is relevant to the proposed substitute claim because it discloses a system based on trusted repositories. However, Stefik’s approach is based on controlling use and distribution of content by enforcing usage rights specified by the content provider.

The exercise of Stefik's usage rights results in action to content. Stefik's methodology provides content providers some control over rights granted to downstream parties when content is transported as a result of exercising usage rights. But Stefik teaches providing this control using the NSOR parameter of its usage rights, which is part of the specification of the usage right itself and can be processed only in connection with the exercise of the encapsulating usage right. A person of ordinary skill would not have been led by the teachings of Stefik '012 toward a system that utilizes meta-rights that are distinct from usage rights and are exercisable to create new rights without resulting in action to digital content.

The various other references addressed above represent the remaining closest prior art that challengers have identified relative to the '280 patent. The Board has previously rejected numerous challenges to the original claim 1 based on Ireton, Gruse, England and Ginter, alone and in various combinations with each other. The proposed substitute claim 37 is no broader than the original claim 1 and is therefore patentable over the same references. Moreover, the teachings of these other references as a whole, which are representative of the knowledge of a person of ordinary skill in the art, would not have provided a suggestion or motivation to modify Stefik '012 to provide for meta-rights having the characteristics recited in the proposed substitute claim. (*Id.*)

The other references each fail to disclose a DRM system that utilizes a meta-

right enforceable by a repository and exercisable to create a new right without resulting in actions to content. And, like Stefik, they also fail to disclose “determining, by a repository, whether the rights consumer is entitled to the right specified by the meta-right” and “exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right.” Modifying Stefik based on the teachings of any of the other references would therefore not lead those skilled in the art to the method of the proposed substitute claim 37. (*Id.*)

Any combination of the remaining references (e.g., England + Ireton, England + Gruse, etc.) would also not have led one of ordinary skill in the art to the subject matter of the proposed substitute claim. None disclose digital rights management using a trusted system of repositories, let alone implementing a meta-right enforceable by a repository and exercisable to create another right without resulting in actions to content. At best, any combination of the teachings of these references would simply create a larger, more complicated combined system that would still not practice all of the limitations of the substitute claim. (*Id.* at ¶154.)

Patent Owner is not aware of any evidence, such as design incentives or market forces, of a motivation to implement any of the prior art references in different ways. (*Id.* at ¶155.) It is aware of no evidence pointing to how, without the benefit of the teachings of the ‘280 patent, any such modifications would have

been implemented in the architecture and principles of operation of the references. (*Id.*) The combined teachings of the prior art would not have created an incentive or suggestion to create a new trusted repository system utilizing meta-rights that are distinct from usage rights and are exercisable to create new rights without resulting in actions to content. The digital rights management environments disclosed in each reference involve many complex interdependent components and methodologies, and one component or step cannot simply be modified without affecting the other components and the whole system's ability to perform intended functions. (*Id.*) A person of ordinary skill would not have been motivated to change prior known systems to provide a repository that determines a recipient's entitlement to receive a right specified by a meta-right before exercising the meta-right to create the new right. (*Id.* at ¶156.)

Accordingly, the subject matter of proposed substitute claim 37 would not have been obvious at the time the invention was made to a person having ordinary skill in the relevant art. (*Id.* at ¶157.)

VII. SUBSTITUTE CLAIM 37 IS SUBSTANTIALLY IDENTICAL TO ORIGINAL CLAIM 1 WITHIN THE MEANING OF 35 U.S.C. ¶252

The USPTO's Patent Trial Practice Guide instructs:

When filing a motion to amend, a patent owner may demonstrate that the scope of the amended claim is substantially identical to that of the original patent claim, as the original patent claim would have been

interpreted by a district court. In such cases, a patent owner may request that the Board determine that the amended claim and original patent claim are substantially identical within the meaning of 35 U.S.C. 252.

77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012.)

The amendments to original claim 1 reflected in proposed substitute claim 37 have the effect of making the substitute claim co-extensive with the district court's construction of the term "meta-right" recited in original claim 1. The district construed "meta-right" to mean "a right that, when exercised, creates or disposes of usage rights (or other meta-rights) but that is not itself a usage right because exercising a meta-right does not result in action to content." (Ex. 2001 at 106.) The language inserted via the substitute claim incorporates all aspects of this construction appropriate to the specific method of utilizing meta-rights recited in the original claim 1. The phrase "disposes of" has not been inserted in the proposed substitute claim because original claim 1 is directed to a particular method of utilizing a meta-right to create a new right.

The district court accepted the parties' agreed construction of "right" as used in '280 claim 1 to mean "a meta-right or a usage right, depending on context." (*Id.* at 9.) Modifying the word "right" in original claim 1 to read "usage right or another meta-right" in the proposed substitute claim thus comports with the district court's construction of "meta-right" as well as of the term "right" as recited in

original claim 1.

Accordingly, the proposed substitute claim does not recite any greater or lesser scope than the scope that original claim 1 has under the district court's claim construction. No other district court has construed the claim. Accordingly, Patent Owner seeks the benefit of the procedure stated in the Patent Trial Practice Guide, and specifically requests that the Board enter a finding that proposed substitute claim 37 and original claim 1 of the '280 patent are substantially identical within the meaning of 35 U.S.C. 252.

VIII. CONCLUSION

For the foregoing reasons, the Patent Owner respectfully requests that the Board grant its Contingent Motion to Amend and, further, that the Board enter a finding that the substitute claim 37 is substantially identical to that of original patent claim 1 within the meaning of 35 U.S.C. ¶252.

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §42.6(e), the undersigned hereby certifies that a true copy of the foregoing PATENT OWNER'S CONTINGENT MOTION TO AMEND UNDER 37 C.F.R. § 42.121 is being served on counsel for petitioners.

Respectfully submitted,

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC. AND APPLE INC.,
Petitioners,

v.

CONTENTGUARD HOLDINGS, INC.,
Patent Owner.

Case No. CBM2015-00040¹
U.S. Patent No. 7,774,280

PETITIONERS' REPLY BRIEF

¹ Case No. CBM2015-00160

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EXHIBIT LIST

<i>Petitioners' Exhibit #</i>	<i>Description</i>
1032	Declaration of Benjamin Goldberg, Ph.D.
1033	Deposition Transcript of David Martin, Ph.D.

I. Introduction

In its Institution Decision, the Board correctly found the '280 patent eligible for Covered Business Method (“CBM”) review, and that the Stefik '012 patent anticipates or renders obvious claims 1, 5, and 11 of the '280 patent.

In its Response, ContentGuard disputes that the '280 patent is CBM-eligible. It contends that any financial transactions that occur are “merely an optional condition” on the exercise of rights. Paper 15 at 32. But ContentGuard cannot run away from its own patent disclosure, which makes clear those transactions are the *central purpose* of its meta-rights scheme. *See* Ex. 1001 at 6:1-17. Next, it contends that its claims involve a “technological invention.” But again, the '280 patent itself refutes this assertion; it explains the technology used to implement the “meta-rights” scheme is old—it is the same technology described years earlier in the Stefik patents. Ex. 1001 at 7:23-24 (“At a high level the process of enforcing and exercising meta-rights are the same as for usage rights.”); *id.* at 7:36-39 (“Thus, the mechanism for exercising and enforcing a meta-right can be the same as that for a usage right. For example, the mechanism disclosed in U.S. Pat. No. 5,634,012 can be used.”).

ContentGuard also argues its scheme is both novel and non-obvious over Stefik. To advance that argument, however, ContentGuard demands the Board first read several new limitations into its claims. Then, it argues the Next-Set-of-Rights

element in the Stefik scheme does not do what Stefik literally says it does—create or delete usage rights for downstream copies of a digital work.

The Board should maintain its findings that (i) the '280 patent is eligible for CBM review, and (ii) claims 1, 5, and 11 of the '280 patent are unpatentable. As ContentGuard does not present separate arguments for claims 5 and 11, those claims stand or fall with claim 1.

II. The '280 Patent Covers Financial Activities And Is CBM-Eligible

Under § 18 of the AIA, a “covered business method patent” is “a patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service.” AIA § 18(d)(1). The Board correctly found the '280 patent covers a financial activity because, *inter alia*, claim 1 covers purchase transactions between a consumer and a supplier. Paper 9 at 7-10. The Board also correctly found the '280 patent does not qualify for the technological invention exception to CBM authority because, *inter alia*, the only “technological” element in the claim is admittedly old and well-known. *Id.* at 10-12.

A. Claim 1 Of The '280 Patent Covers A Financial Activity

The '280 patent is directed to systems and methods to enable the commercial distribution of digital content from a content supplier, via distributors and retailers, to consumers. *See* Paper 1 at 9-15. The very purpose of that scheme is to enable

financial transactions where a “rights consumer” purchases rights from a “rights supplier.” For example, claim 1 specifies a process where a supplier “obtain[s] a set of rights” that includes a meta-right, “determin[es]” whether the “rights consumer” is entitled to the right specified by the meta-right, and if so, “exercise[es]” the meta-right to create the right for “the rights consumer.” Ex. 1001 at 15:5-22.² Indeed, as the Petition explained and as the Board recognized, the ’280 specification describes numerous embodiments where a rights consumer purchases rights from a rights supplier. Paper 1 at 10-12; Paper 9 at 9-10.

These financial transactions are not a mere coincidence in the ’280 patent scheme—securing payment for uses of digital works is the central purpose of that scheme. *See, e.g.*, Ex. 1001 at 5:36-38 (“Clearinghouse 90 can be used to process payment transactions and verify payment prior to issuing a license.”); *id.* at 2:18-21; *Id.* at 14:5-10 (explaining use of state variables to “...acknowledge that an appropriate fee has been paid...”); *see also id.* at 6:1-4; *id.* at 6:18-25 (explaining

² ContentGuard faults the Board for relying on the preamble of claim 1. *See* Paper 15 at 29-30. But *Bicon, Inc. v. Struamann Co.*, 441 F.3d 945, 952-53 (Fed. Cir. 2006), cited by ContentGuard, actually shows the Board properly considered claim 1’s preamble, as it recites “essential elements of the invention” and includes terms such as “rights consumer” that serve as antecedent bases to the body of the claim.

role of meta-rights in *commercial* distribution chain including distributors, retailers and consumers). More than substantial evidence supports the Board’s conclusion the claim 1 covers an activity “that, at the very least, is incidental or complementary to a financial activity.” Paper 9 at 9-10.

In its Response, ContentGuard argues the Board erred in finding the ’280 Patent CBM-eligible because claim 1 *could* cover a no-fee transaction. Paper 15 at 31. It then contends that to be CBM eligible, a claim must *necessarily* cover *only* financial activities or an activity incidental or complementary to a financial activity, and no other kind of activity. *Id.* at 33.

The Board properly considered and rejected this argument. Paper 9 at 8-9. That a single transaction might not collect fees in a scheme designed to collect fees is irrelevant—that hypothetical may never occur and plainly is not the intended purpose of the ’280 patent. More directly, nothing in § 18 limits CBM-eligibility in this way. *See, e.g., Compass Bank v. Maxim Integrated Prods., Inc.*, CBM2015-00102, Paper 16 at 12 (PTAB Oct. 7, 2015) (CBM-eligible Patent where “independent claim 1 *encompasses* an apparatus for managing financial products or delivering financial services”) (emphasis added); *Sony Computer Entm’t Am. LLC v. ADC Tech. Inc.*, CBM2015-00026, Paper 10 at 12-13 (PTAB July 3, 2015) (“[w]e do not interpret the statute as requiring the literal recitation of financial products or services in a claim”); *Photoshelter, Inc. v. Uniloc USA, Inc.*,

CBM2015-00023, Paper 24 at 12-13 (PTAB May 21, 2015) (Wood, J.); *Global Tel*Link Corp. v. Securus Techs., Inc.*, CBM2015-00145, Paper 20 at 10-14 (PTAB Nov. 25, 2015) (Braden, J.).

Despite this, ContentGuard devotes four pages of its response to a discussion of decisions addressing CBM eligibility. Those cases are all readily distinguishable from the present case because the '280 patent does not describe or claim a generalized technological process that might only theoretically be applied in a financial context. Instead, the central purpose of the '280 patent is *to control the sale of rights in multi-tiered distribution schemes*. *E.g.*, Ex. 1001 at 2:22-48 (describing problems with the sale and distribution of content and rights); Paper 15 at 42-43 (arguing '280 patent enables greater control over “distributors or resellers”). Cases more relevant than the ones cited by ContentGuard find challenged patents CBM-eligible. For example, the Federal Circuit recently affirmed the Board’s finding of CBM eligibility for claims directed to “the electronic sale of digital audio” using “components [that] themselves were known in the art.” *SightSound Techs., LLC v. Apple Inc.*, Nos. 2015-1159, -1160, slip op. at 12-13 (Fed. Cir. Dec. 15, 2015). Like that case, the '280 patent claims are all concerned with methods for selling digital content to consumers.

B. The '280 Patent Does Not Claim A Technological Invention

The Board also correctly found that the '280 patent does not fall within the

“technological invention” exception to CBM authority. Paper 9 at 10-12. A “technological invention” is one in which (i) “the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art” and (ii) “solves a technical problem using a technical solution.” 37 C.F.R. § 42.301(b); *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1326 (Fed. Cir. 2015). Claim 1 of the ’280 patent fails both prongs of this inquiry.

First, the record supports the Board’s finding the ’280 patent does not claim a novel and non-obvious technological feature. Paper 9 at 12. Most significantly, the ’280 patent itself admits the claimed meta-right methods are to be practiced using *pre-existing* technologies— it states: “the mechanism for exercising and enforcing a meta-right can be the same as that for a usage right” and it identifies as one example the mechanisms described in U.S. Pat. No. 5,634,012 to Stefik. Ex. 1001 at 7:36-39. The ’280 patent also freely admits the claimed meta-rights scheme is built on old and known technologies including repositories, usage rights, state variables, and mechanisms for enforcing and exercising rights (including meta-rights). *See* Ex. 1001 at 1:37-43, 7:23-24, 7:36-39, 9:38-40; Paper 1 at 20-24. Such features cannot impart technical novelty to the ’280 claims. *See* Paper 9 at 11; Paper 1 at 17-18; *SightSound*, slip op. at 12-13. The ’280 patent also admits that meta-rights are an extension of the pre-existing concept of rights taught in Stefik. Ex. 1001 at 5:43-47. Thus, a meta-right is simply another type of “right”—at a

technical level, it is a simple and pre-existing software construct. *See* Ex. 1014 ¶¶ 38-42. And even if meta-rights were considered to be a technological feature (which they are not), they are not novel because meta-rights are disclosed and taught by the Stefik patent. *See* Paper 1 at 16-20; Paper 9 at 12.

Claim 1 also fails the second prong of the exception. The '280 specification admits that meta-rights address a *business* problem, *not a technological* problem. As the '280 patent explains, meta-rights enable “typical business models for distributing digital content,” (Ex. 1001 at 5:39-40), and are particularly useful in “multi-tiered distribution models” that include “entities that . . . are in the business of manipulating the rights associated with the content” (*id.* at 6:1-8). *See also* Paper 1 at 11-12, 21. And the patent, as described by ContentGuard, solves a business problem: improving the control of the transfer of rights through distribution channels. Paper 15 at 6-7, 41-42.

III. Claim Construction

The Board construed the term “meta-right” to mean “a right that one has to generate, manipulate, modify, dispose of or otherwise derive another right.” Paper 9 at 17. Although Dr. Martin agreed that the Board’s construction describes properties of meta-rights (Ex. 1033 at 14:24-15:9), ContentGuard argues the Board should instead adopt the district court’s construction, which would add that the meta-right “is not itself a usage right because exercising a meta-right does not

result in action to content.” The district court included that additional language to aid the jury, which is unnecessary here because there is no risk the Board will be confused by its own construction. It is also unnecessary because, as the Board correctly found, the claim adequately identifies the actions taken by “meta-rights,” and additional verbiage is not needed to give meaning to the claim term. Paper 9 at 16. And, of course, the Board and the district court apply different claim construction standards. *Versata*, 793 F.3d at 1328 (applying broadest reasonable interpretation standard to CBMs).

In any event, adding ContentGuard’s proposed language is unwarranted because it has no consequence in this case. This is because, as explained below, exercising a “Next-Set-of-Rights” in the Stefik scheme does not result in action to content. ContentGuard’s proposal may actually be an indirect attempt to add yet another restriction into the claims; namely, that a meta-right cannot be exercised concurrently with the exercising of one or more independent usage rights. But nothing in the ’280 claims or disclosure can be construed as precluding a meta-right from being exercised at the same time as a usage right.

Separately, Petitioners disagree with ContentGuard’s interpretations of some other terms (e.g., “behavioral integrity”). But regardless of the exact claim construction used, Stefik undisputedly discloses the “repository,” “usage right,” and “state variable” elements. *See* Ex. 1033 at 39:19-22, 57:13-21, 132:15-19.

IV. Anticipation

The Board correctly found that Stefik describes a “meta-right” in the form of the “Next-Set-of-Rights” (“NSOR”) grammar element, because the NSOR specifies usage rights a repository can create or delete when the NSOR is exercised. Paper 9 at 35-37. ContentGuard challenges that finding by contending that Stefik does not disclose or suggest a “meta-right” that can be “exercised independently of” a usage right, (Paper 15 at 53-54), and similar arguments about “independently” or “separately” exercisable meta-rights appear throughout ContentGuard’s brief. The problem with these arguments is that the claims do not require that meta-rights and usage rights be “exercised independently” or “exercised separately,” even under ContentGuard’s proposed construction.

ContentGuard also argues that Stefik does not disclose the “determining” or “exercising” steps. Paper 15 at 56-63. The Board correctly rejected those arguments based on the way that the NSOR is actually used by repositories in the Stefik scheme. Paper 9 at 35-37.

A. Stefik’s NSOR Is A “Meta-Right” Because It Is A Right To Generate, Dispose Of, Or Modify Usage Rights

In arguing that Stefik’s NSOR grammar element is not a meta-right, ContentGuard seems to assume that the claims—whether as construed by the Board or as ContentGuard proposes in its response—preclude a meta-right from being exercised concurrently with one or more usage rights. Nothing in the claims

imposes any such restriction—the claims employ open “comprising” language, and only address actions being taken regarding meta-rights. ContentGuard’s arguments also ignore how the NSOR is actually used in the Stefik scheme.

1. The NSOR Controls Usage Rights Creation

The NSOR element is used by repositories in the Stefik scheme to control what usage rights the repository can create, delete, or modify for a work after it is transported. Paper 1 at 58-60; Ex. 1002 at 21:47-59; Ex. 1014 ¶ 64. If the NSOR does not specify the rights for the next copy of the work, the new copy’s rights will be the same as those of the original copy. Ex. 1002 at 21:50-52. If the NSOR does specify rights, those usage rights will be added, deleted, or replaced when the NSOR is exercised. *Id.* at 21:47-59.

A simple example illustrates how the NSOR element can be used by a publisher to specifically grant the right to add, delete, or replace certain usage rights. Consider two digital works with the following rights:

<u>Work 1</u>	<u>Work 2</u>
[Play] [Copy] [Loan]	[Play] [Copy] [Loan] [<u>Next-Set-of-Rights: (Delete: Copy Loan) (Add: Print)</u>]

In this example, if the Loan right for either work is exercised, the repository will make a copy of the content and then will create usage rights for that copy either according to the default rules (Work 1) or as specified in the NSOR (Work 2). Ex. 1032 ¶ 9. Thus, for Work 1, the repository will create Play, Copy, and Loan

usage rights for the new copy of the work. This is because there is no NSOR element that modifies the default rules. *See id.*; Ex. 1002 at 21:50-52. For Work 2, the repository will create for the new copy of the work a different set of usage rights: (i) it will create a Play usage right (same as the original copy), (ii) it will not create a Copy or Loan usage right for that copy (i.e., it will “delete” those usage rights in the copy) and (iii) it will add a “Print” usage right (not present in original copy). Importantly, the different set of usage rights in the copy relative to the usage rights for the original digital work is directly attributable to actions taken by the repository when using the NSOR. In other words, the data in the NSOR directs the repository to: (i) delete the Copy and Loan usage rights from the copy (*i.e.*, by specifying “Delete: Copy Loan”) and (ii) add the Print usage right to the copy (*i.e.*, “Add: Print”). *See* Ex. 1032 ¶ 9; *see also* Paper 1 at 59-60, Ex. 1014 ¶¶ 64-66, 72.

The “Loan” usage right thus specifies certain actions that can be taken on the content; namely, making a copy of the content and transferring it to another repository. Ex. 1032 ¶ 10. For both Work 1 and Work 2, exercising the Loan right causes the same action to the content: a copy is made and loaned to another repository. *Id.* But the usage rights that are created in the loaned copies are different because only one of the works has a Next-Set-of-Rights meta-right. *Id.* Exercising the NSOR is what results in addition of the “Print” usage right that would not be created by exercising the Loan usage right, and it is the NSOR which

causes deletion of the “Copy” and “Loan” usage rights in the copy of the digital work. This can be easily appreciated by recognizing if there is no NSOR (i.e., as in the Work 1 example), the Loan usage right will create the copy with the same set of usage rights as the original.

Because exercising the NSOR element determines what usage rights a repository can generate during a transaction, it is “a right that one has to generate, manipulate, modify, dispose of or otherwise derive another right,” which satisfies the Board’s construction. For the same reasons, the NSOR element is also “a right about a right” and “a right that, when exercised, creates or disposes of usage rights (or other meta-rights).”

ContentGuard nonetheless argues the NSOR element must be considered a “usage right” because the NSOR is consulted during the exercise of the Loan usage right. Paper 15 at 53. But in its arguments, ContentGuard improperly conflates the use of the NSOR element with the use of the associated Loan usage right. What Stefik actually shows is that exercising the usage right controls the actions being taken on the content (*e.g.*, making a copy or loaning a copy of the digital work), while exercising the NSOR creates or deletes “usage rights” which are attached to the copy of the digital work. Ex. 1032 ¶ 11. Both are exercised, for different purposes, as Petitioners and Dr. Goldberg have clearly and consistently explained.

2. A Participant In The System Can Choose Whether To Exercise An NSOR

ContentGuard contends an NSOR is not a “right” (meta or usage) because it is “unconditionally applied” and the user has no choice about whether to use it. Paper 15 at 49, 52. But Stefik illustrates that a participant in its distribution scheme *can* choose whether to exercise an NSOR by selecting from multiple versions of the same usage right, and furthermore that the use of the NSOR can be subject to conditions. *See, e.g.*, Ex. 1002 at 27:15-33. For example, Stefik describes a digital work with two different versions of a “Loan” right:

```
((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))))
```

Ex. 1002 at 27:15-33; *see also* Paper 15 at 58-59 (discussing this example). In this example, the first “Loan” right has an NSOR element, as well as a Remaining-Copy-Rights element that can also be exercised to create rights (for the original copy owner), and it requires a daily \$10 fee. Ex. 1002 at 27:27-30. The second “Loan” right has no NSOR element and no rights specified in the Remaining-Copy-Rights. *Id.* at 27:30-33.

When this digital work is loaned to another repository, the NSOR element is

only exercised if the first Loan right is selected and the \$10 fee is paid. *Id.* at 27-30; *see also* Ex. 1014 ¶ 76; Ex. 1032 ¶ 13; Ex. 1033 at 113:12-14 (confirming the first Loan right costs \$10 to exercise). The same is true for Remaining-Copy-Rights. As this example shows, a participant in the system may choose to exercise a particular version of a usage right based on its associated NSOR element or its Remaining-Copy-Rights, and must meet the corresponding conditions to do so. Ex. 1032 ¶ 13.

In addition, the NSOR element allows a publisher to control usage rights creation as a digital work is passed down a chain of repositories. *See* Paper 1 at 59. For example, the publisher could supply a digital work with multiple versions of a Copy usage right, each with a different NSOR element bearing a different fee. Ex. 1032 ¶¶ 14-16. The publisher could thereby exert control over usage rights creation as a digital work is passed down a chain of repositories, while permitting a degree of choice (as to which NSOR element to use) by downstream distributors and consumers. *Id.*; *see also* Ex. 1002 at 27:1-28:3; Ex. 1014 ¶¶ 59, 64, 68.

3. The NSOR Element Can Specify Particular Rights By Itself

ContentGuard argues that “an NSOR parameter cannot even be interpreted as a separate right all by itself.” Paper 15 at 54. The point of this argument is unclear, since Dr. Martin admitted the claims do not require that a meta-right has to be interpreted all by itself. Ex. 1033 at 150:23-151:7. ContentGuard nevertheless

proceeds to discuss an embodiment of Stefik in which the NSOR parameter is unspecified. Paper 15 at 54. But the embodiments of greater interest (because they use the NSOR to create rights) are those in which the NSOR parameter *is* specified. In those embodiments the NSOR determines usage rights that get added or created, without reference to other usage rights.

The Board recognized this in its Institution Decision. As it correctly found, Stefik teaches that the NSOR grammar element can be implemented by including key words in the NSOR, including “Add.” Paper 9 at 33-34, 37. Indeed, Stefik clearly explains this, stating: “Versions of rights after Add: are added to the current set of rights. Ex. 1002 at 21:53-54. “Add” precisely identifies the rights that may be generated and does so without reference to other usage rights.

4. Even Under ContentGuard’s Proposed Claim Construction, the NSOR Is a Meta-Right

ContentGuard contends that if the Board were to adopt ContentGuard’s construction of meta-right, the NSOR element could not be found to be a meta-right. But, as explained in §§ IV.A.1-3, above, exercising the NSOR element creates (or destroys or modifies) *usage rights*; it does not result in actions to content. For example, if a “Copy” usage right has an NSOR element, exercising the Copy usage right results in an action to content (making a copy) while exercising the NSOR element results in creating or destroying usage rights for the copy of the digital work (the rights specified using “Add:” or “Delete:”). Ex. 1032

¶ 17. Because the NSOR element is “a right that, when exercised, creates or disposes of usage rights (or other meta-rights) but that is not itself a usage right because exercising a meta-right does not result in action to content,” it satisfies even ContentGuard’s alternative construction of a “meta-right.” *Id.*

Importantly, there is no evidence in the record that the NSOR is “itself” a usage right. Certainly, ContentGuard has never suggested this is the case. In fact, ContentGuard’s expert acknowledged the NSOR exists as a discrete and distinct field within a data structure that also includes the data representing the usage rights. *See, e.g.*, Ex. 2009 ¶¶ 104-105. ContentGuard does contend the NSOR is “*part of* a usage right,” Paper 15 at 56 (emphasis added). But this is not the same as saying that the NSOR is itself a usage right, which is what the “not itself a usage right” portion of ContentGuard’s construction would require. That the data representing the meta-right is stored in a common file structure with other data representing usage rights is of no consequence. Ex. 1032 ¶ 18.

There also is no evidence that using a Stefik NSOR “result[s] in”—i.e., *causes*—an action to content. Critically, ContentGuard’s expert Dr. Martin offered no opinion in his declaration that using the NSOR results in an action to content. *See* Ex. 1033 at 149:22-150:6. Dr. Martin also agreed the NSOR does *not* cause a usage right to be exercised. *Id.* at 148:19-24 (“... I guess I would agree that the presence of a next set of rights parameter does not cause a particular usage right to

be exercised.”). To the extent there is any causal relationship between use of the NSOR and exercise of a usage right, it is that the usage right can trigger the exercising of the NSOR, not the other way around. This is how ContentGuard itself describes the system, stating that “during exercise of the usage right Stefik’s system consults the NSOR parameter to populate the next set of rights for that *post-operation* content.” Paper 15 at 53 (emphasis added); *see also* Ex. 1033 at 148:10-18. Whether the usage right causes use of the NSOR or not is immaterial to the claim, even under ContentGuard’s proposed construction. That sequence is simply not one in which exercising the NSOR “result[s] in action to content.”

At his deposition, Dr. Martin seemed to attribute relevance to the notion that the NSOR is used “in the context of exercising a usage right that does result in actions to content.” Ex. 1033 at 150:3-6. But, again, this cannot distinguish the claims at issue from the NSOR in Stefik, because no claim limitation bars a meta-right from operating “in the context of” a usage right, or otherwise being used contemporaneously with a usage right. The question, under ContentGuard’s proposed construction, is whether exercising the NSOR will “result in” action to content. The evidence demonstrates it does not.

To summarize, there is no evidence in the record that suggests, much less proves, that the NSOR described in Stefik is a “usage right” according to the ’280 patent. Likewise, there is no evidence in the record establishing that the exercise of

the NSOR results in actions to content. Whether exercising the usage right results in exercising the NSOR is irrelevant, as is whether the NSOR is exercised contemporaneously with actions that are being taken on content. As long as exercising the NSOR does not result in actions to content, it does not run afoul of the claim requirements for a meta-right, under both the Board’s construction and ContentGuard’s alternative construction. *See* Ex. 1032 ¶¶ 17-18. Thus, even under ContentGuard’s proposed construction, the NSOR shown in Stefik is a meta-right, not a usage right.

B. Stefik Discloses The “Determining” Step

Stefik shows that during a usage rights transaction between two repositories (*e.g.*, a server repository and a requesting repository), a server repository validates all conditions on the exercise of a usage right before permitting the requesting repository to access a digital work. *See* Paper 1 at 65-68; Paper 9 at 37. This process satisfies the claim limitation “determining, by a repository, whether the rights consumer is entitled to the right specified by the meta-right.” Paper 9 at 37. ContentGuard’s attempts to distinguish Stefik’s validation process from the “determining” step disregard the claim language and the actual teachings in Stefik.

1. NSOR Elements Cannot Be Exercised Unless All Conditions Are Satisfied, Including Those Specific To The NSOR And To The Requesting Repository

Stefik teaches that to exercise a usage right with an NSOR, a repository must

first *determine* whether all applicable conditions are met. For example, in the Loan example discussed above (Ex. 1002 at 27:15-33), a \$10 fee must be paid to exercise the first Loan right. If the \$10 is not paid, the requester can still borrow the work (using the second Loan right), but different rights are created (at both the original copy owner’s and the requester’s repositories). *Id.* at 27:26-33. This example shows that compliance with the \$10 fee condition controls whether the NSOR element is exercised. *See id.*; Ex. 1032 ¶ 19. Similarly, if a Loan right contains a “Security Level” parameter, the Loan right cannot be exercised unless the requesting repository meets the minimum security level requirement. *See* Ex. 1002 at 26:16-28 (discussing “SC:3” element). As Stefik explains, during a transaction, a server repository validates all conditions on the exercise of a usage right, including any security level conditions applicable to the consumer repository. *See, e.g., id.* at 7:23-29, 27:15-33. In the “SC:3” example, “Copy or transfer operations can take place only with repositories of security level three or greater.” Ex. 1002 at 26:28-36. Unless the server repository determines that the consumer repository is entitled to the right because it has sufficient security, any usage rights specified by an NSOR element associated with the Copy or Transfer right will not be created. *See* Ex. 1014 ¶ 77; Ex. 1032 ¶ 19.

2. Stefik Shows Any Required Fees Can Be Paid By The Requesting Repository

ContentGuard next argues that Stefik does not show the “determining” step

because it believes the supplier repository, not the consumer repository, must pay the fees required to exercise a usage right. Paper 15 at 59. That assertion rests upon Dr. Martin’s contorted reading of Stefik, under which he concludes the party giving away the loaned content (the supplier) must pay the fees to enable use of the content, rather than the beneficiary of the loan. *Id.* (citing Ex. 2009 ¶ 86); Ex. 1033 at 153:25-154:25. That reading conflicts with the Stefik disclosure and claims, which confirm that a **requesting** repository (i.e., the recipient) may be required to pay the fees. In fact, claim 7 of the Stefik ’012 patent expressly requires this, stating: “said server repository transmitting a first assign fee transaction *identifying said requesting repository as a payer for said usage fee* to a first credit server[.]” Ex. 1002 at 55:1-3 (emphasis added). As another example, Stefik shows that a distributor can add a condition to the work requiring a fee to be paid to the distributor, in addition to the fee payable to the content creator. *Id.* at 45:45-67, 47:1-12. In this scenario, when a consumer buys a copy from the distributor, the consumer must pay specified fees to both the author and the distributor. *Id.* at 45:63-64; *see also* Ex. 1014 ¶ 76 (discussing fee paid by Repository 2). In these ways, the server **determines** whether the requester is entitled to the specified right.

C. Stefik Discloses The “Exercising” Step

ContentGuard’s argument that Stefik does not disclose the “exercising” step rests primarily on its assertion that Stefik does not disclose the “determining” step

or “meta-rights.” Paper 15 at 61-62. That assertion, of course, is contrary to the actual teachings in Stefik, as explained in § IV.B above. It is also contrary to the ’280 patent disclosure, which admits that meta-rights may be exercised in *the same manner* as rights are exercised in the Stefik scheme: “Thus, the mechanism for exercising and enforcing a meta-right can be the same as that for a usage right. For example, the mechanism disclosed in U.S. Pat. No. 5,634,012 can be used.” Ex. 1001 at 7:36-39; *see also id.* at 7:23-24, 7:55-58, 9:38-40. Finally, ContentGuard contends that, because the NSOR is exercised at the same time as a usage right, Stefik cannot disclose exercising a meta-right. Paper 15 at 62-63. But, as Dr. Martin admitted, a “meta-right” does not have to be exercised a different time than when a usage right is exercised. *See* Ex. 1033 at 20:1-13. This argument again rests on limitations that are nowhere found in the claims.

V. Obviousness

The Board correctly found that, even if a meta-right had to be exercised without simultaneously copying or transferring the digital work associated with it, it would have been obvious to modify Stefik to separately exercise the NSOR element. Paper 9 at 41-42. ContentGuard challenges that finding by arguing there would be no motivation to make such a change and that Stefik “teaches away” from the separate exercise of the NSOR element. ContentGuard’s arguments are without merit.

A. A Person Of Ordinary Skill Would Have Been Motivated To Adapt Stefik To Exercise The NSOR In A Separate Transaction

As explained in the Petition, it would have been obvious to “exercise . . . a meta-right . . . in a different action, from the copying or transfer of the underlying digital work.” Paper 1 at 76. For example, if the NSOR were associated with a “Copy” right, it would have been obvious to exercise the NSOR meta-right in a separate transaction either before or after creating a copy of a work.

This is not a case where there are a multitude of choices with different consequences. Instead, there are only two options for when the NSOR might be exercised relative to when a usage right is exercised: at the same time or at a different time. Paper 1 at 75-76; Ex. 1014 ¶ 98. A person of ordinary skill in the art would have recognized it that segmenting a transaction into discrete actions was a conventional technique in Internet-based transactions, and it would have been common sense to perform those actions at different times. Paper 1 at 75-76; Ex. 1014 ¶¶ 98-99. Adjusting the timing of actions so that the NSOR element was exercised separately from the “Copy” or “Transfer” action thus would have been one of “a finite number of identified, predictable solutions” that was readily within the grasp of the skilled person. Ex. 1014 ¶¶ 98-99; *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007); *see also id.* at 417 (“If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability.”). Importantly, exercising the NSOR at a different time than the usage right is

exercised would have no practical consequences for operation of the Stefik scheme; the NSOR would still be used according to its established function disclosed in Stefik, with only the timing and/or circumstances of use being modified. Ex. 1032 ¶ 22; *KSR*, 550 U.S. at 417 (nonobviousness requires “more than the predictable use of prior art elements according to their established functions”). This means the same conditions could be applied for determining the consumer’s entitlement to the right, and all claim steps are disclosed or obvious.

Nonetheless, ContentGuard argues there would have been no motivation to adapt Stefik to include meta-rights that could be exercised separately from actions to content. Paper 15 at 68-69. But the variety and flexibility of configurations in Stefik show otherwise. Stefik discloses that usage rights can be combined to create complex distribution channels, and it describes numerous distribution models supported by usage rights. Ex. 1002 at 45:20-24. For example, Stefik shows a scenario where a separately issued “distribution license” is used to control whether downstream parties can make copies of a digital work. Ex. 1002 at 46:1-44. Parties with such a license can make copies, while parties that do not have the distribution license cannot do so. *Id.* at 46:20-27, 46:40-44; *see also id.* at 26:46-52 (showing analogous usage rights statements). Stefik therefore suggests to the skilled person that it is desirable to manage rights at one level of a distribution chain in order to control rights granted at a subsequent, downstream level of the chain. Ex. 1032

¶ 23; *see also* Ex. 1033 at 126:16-23 (creator of a work “is able to exert control over that work further down the distribution chain”). And ContentGuard’s contention that Stefik does not teach the skilled person how to exercise the NSOR separately cannot be correct, as the ’280 patent relies entirely on Stefik for its mechanism of exercising meta-rights. Ex. 1001 at 7:36-39.

Stefik also describes many other examples of using licenses and shows various combinations of usage rights to control which distributors can create copies of a digital work and sell them to consumers and whether additional fees can be added to the digital works. *E.g.*, Ex. 1002 at 45:45 (“Paid Distributors”), 47:14 (“Distribution Trees”), 48:18 (“Commercial Libraries”). Stefik explains that these distribution scenarios permit “fine grained control of the rights and fees.” Ex. 1002 at 48:6-7. Stefik therefore expressly provides a way to solve the same problem the ’280 patent purports to address, namely allowing authors to maintain adequate rights control in multi-level distribution schemes so they get paid for the use of their work. Ex. 1001 at 2:22-48; Ex. 1033 at 124:13-125:1 (“Distribution Trees” model is a type of multi-tiered distribution), 126:16-23 (downstream control).

To further these goals identified in Stefik, a skilled person would have found it obvious to exercise the NSOR element separately from when usage rights are exercised. Ex. 1032 ¶ 24. Indeed, the Stefik specification explicitly states that “those skilled in the art” would have made “various alternative, modifications,

variations or improvements” of the disclosed embodiments. Ex. 1002 at 52:1-6.

B. Stefik Does Not “Teach Away” From Adding Or Modifying Usage Rights Separately From An Action To Content

ContentGuard argues that Stefik “teaches away” from creating, destroying, or modifying usage rights separately from an action to content. Paper 15 at 67. To the contrary, Stefik teaches the desirability and feasibility of adding, removing, or modifying the rights for a digital work without any action on content.

For example, Stefik shows use of an “Embed” usage right to enable a distributor or retailer to add its own fee conditions to a digital work. Ex. 1002 at 41:54-56; *id.* at 26:6-10. When Stefik’s Embed usage right is exercised to add a new fee condition, there is no action on the content. Ex. 1032 ¶¶ 25-26. (This is very similar to a meta-right that modifies conditions on a usage right, which Dr. Martin acknowledged was part of the ’280 patent scheme. Ex. 1033 at 61:16-62:14.) Stefik thus suggests using rights that can be exercised separately from an action to content to change other rights, and teaches a process for doing so. The Embed usage right with an NSOR element could also be exercised to add usage rights without performing an action on content. Ex. 1032 ¶¶ 25-27.

VI. Conclusion

For the above reasons, Petitioners request that the Board maintain its finding that Stefik anticipates or renders obvious claims 1, 5, and 11 of the ’280 patent.

Dated: December 22, 2015

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CERTIFICATE OF SERVICE

I hereby certify that on this 22nd day of December, 2015, a copy of this Notice of Stipulation has been served in its entirety by email on counsel for Petitioners and on the following counsel of record for Patent Owner:

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC. AND APPLE INC.,
Petitioners,

v.

CONTENTGUARD HOLDINGS, INC.,
Patent Owner.

Case No. CBM2015-00040¹
U.S. Patent No. 7,774,280

PETITIONERS' RESPONSE TO MOTION TO AMEND

¹ Case No. CBM2015-00160

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EXHIBIT LIST

<i>Petitioners' Exhibit #</i>	<i>Description</i>
1032	Declaration of Benjamin Goldberg, Ph.D.
1033	Deposition Transcript of David Martin, Ph.D.

I. Introduction

Patent Owner ContentGuard's motion to amend should be denied for three reasons: (i) it does not demonstrate patentability over the Stefik '012 prior art reference cited in the Board's Institution Decision, (ii) it does not establish that the proposed substitute claim meets the written description requirement, and (iii) ContentGuard effectively admits the amendments are not prompted by any issue of patentability presented in this proceeding. ContentGuard does not present separate patentability arguments for claims 5 and 11, so the proposed amendment is futile for those claims as well.

II. The Amendment Is Not Properly Presented in this Proceeding

In its motion to amend, ContentGuard effectively admits the amendments are not responsive to any issue of patentability raised in this proceeding. First, ContentGuard admits the terms "content" and "usage rights" being added to claim 1 simply makes explicit what is already implicit in the claims. *See, e.g.*, Paper 16 at 3. Its proposed amendment that a "meta-right" specify "a usage right or another meta-right" likewise is admitted to simply make explicit the meaning of the generic term "right" in the claim. *Id.* ("The parties are in agreement that "right" would be understood as generic for usage right or meta-right."). And the last amendment it proposes, adding the phrase "wherein the meta-right is not itself a usage right because exercising the meta-right does not result in action to the

content,” is again portrayed as not having any effect on the scope or meaning of the claim. *Id.* at 24-25.

Notably absent in the motion to amend is any explanation how the proposed amendments address and resolve the patentability issues identified by the Board to that exist for the claims. This failure is fatal to the motion as it does not in any manner advance the resolution of the patentability issues raised for claim 1. *See* 37 C.F.R. § 42.121(a)(2) (“A motion to amend may be denied where: (i) The amendment does not respond to a ground of unpatentability involved in the trial”). And, as explained in more depth below, the amendments in fact do not resolve the patentability deficiencies of the claims over the Stefik ’012 patent.

III. The Proposed Amended Claim Is Not Patentable Over Stefik

ContentGuard’s motion fails to demonstrate the amended claim is patentable over the closest known prior art. In particular, it fails to demonstrate the claims are patentable over the Stefik ’012 reference, which is the basis of the unpatentability grounds in the Institution Decision.²

² Petitioners do not address Patent Owner’s assertions of patentability over the other references addressed in the motion to amend, but reserve their right to rely on those references in other legal proceedings as prior art against any claim of the ’280 patent, including the proposed substitute claim (if entered).

The modifications set forth in ContentGuard’s proposed amendment do not distinguish Stefik. The additions to the “obtaining” step (“of content,” “usage” and “or another meta-right”) are admitted to not alter that step in any manner. *See* Paper 16 at 3, 9-11. And, as set forth below, Stefik discloses and suggests methods that fully satisfy the amended “exercising” step (including the limitation “and wherein the meta-right is not itself a usage right because exercising the meta-right does not result in action to the content”). The amended claim thus remains unpatentable over Stefik.

A. The Stefik Next-Set-Of-Rights Element Satisfies The “Exercising” Step Of Proposed Substitute Claim 37

The operation of the “Next-Set-of-Rights” (“NSOR”) element, as described in Stefik, meets the “exercising” step of proposed substitute claim 37. In particular, as the Board previously found, the NSOR element is a meta-right because it is a right that one has to generate, manipulate, modify, dispose of or otherwise derive another right. *See* Paper 9 at 35-36. The added requirement that a “meta-right” is not a “usage right” and exercising it does not result in an action to content has no effect on the status of the NSOR as a “meta-right”—the NSOR is plainly not a “usage right” and exercising it does not result in actions to content, but instead results in creation, deletion or modification of “usage rights.”

There is no evidence whatsoever that the NSOR is “itself” a usage right. Nor is there any evidence that using the Stefik NSOR “result[s] in”—i.e., causes—an

action to content. Thus, ContentGuard’s proposal to add to the claim an express requirement that “the meta-right is not *itself* a usage right because exercising a meta-right does not *result in* action to the content” has no bearing on the identified patentability deficiency of claim 1 over Stefik.

Importantly, even as amended, the claim would not require a meta-right to be exercised separately from a usage right. Even if it did, separating the exercise of a meta-right from that of a usage right would have been an obvious modification to Stefik for a person of ordinary skill in the art in 2001. *See* Ex. 1014 ¶¶ 96-99; Paper 9 at 40-42.

1. The NSOR Controls Usage Rights Creation

The NSOR element is used by repositories in the Stefik scheme to control what usage rights the repository can create, delete, or modify for a work after it is transported. *See* Ex. 1002 at 21:47-59; Ex. 1014 ¶ 64. If the NSOR does not specify the rights for the next copy of the work, the new copy’s rights will be the same as those of the original copy. Ex. 1002 at 21:50-52; Ex. 1014 ¶ 64. If the NSOR does specify rights, those usage rights will be added, deleted, or replaced when the NSOR is exercised. Ex. 1002 at 21:47-59.

A simple example illustrates how the NSOR element can be used by a publisher to specifically grant the right to add, delete, or replace certain usage rights. Consider two digital works with the following rights:

<u>Work 1</u>	<u>Work 2</u>
[Play] [Copy] [Loan]	[Play] [Copy] [Loan] [Next-Set-of-Rights: (Delete: Copy Loan) (Add: Print)]

In this example, if the Loan right for either work is exercised, the repository will make a copy of the content and then will create usage rights for that copy either according to the default rules (Work 1) or as specified in the NSOR (Work 2). Ex. 1032 ¶ 9. Thus, for Work 1, the repository will create Play, Copy, and Loan usage rights for the new copy of the work. This is because there is no NSOR element that modifies the default rules. *See id.*; Ex. 1002 at 21:50-52. For Work 2, the repository will create for the new copy of the work a different set of usage rights: (i) it will create a Play usage right (same as the original copy), (ii) it will not create a Copy or Loan usage right for that copy (i.e., it will “delete” those usage rights in the copy) and (iii) it will add a “Print” usage right (not present in original copy). Importantly, the different set of usage rights in the copy relative to the usage rights for the original digital work is directly attributable to actions taken by the repository when using the NSOR. In other words, the data in the NSOR directs the repository to: (i) delete the Copy and Loan usage rights from the copy (*i.e.*, by specifying “Delete: Copy Loan”) and (ii) add the Print usage right to the copy (*i.e.*, “Add: Print”). *See* Ex. 1032 ¶ 9; *see also* Ex. 1014 ¶¶ 64-66, 72.

The “Loan” usage right thus specifies certain actions that can be taken on the content; namely, making a copy of the content and transferring it to another

repository. Ex. 1032 ¶ 10. For both Work 1 and Work 2, exercising the Loan right causes the same action to the content: a copy is made and loaned to another repository. *Id.* But the usage rights that are created in the loaned copies are different because only one of the works has a Next-Set-of-Rights meta-right. *Id.* Exercising the NSOR is what results in addition of the “Print” usage right that would not be created by exercising the Loan usage right, and it is the NSOR which causes deletion of the “Copy” and “Loan” usage rights in the copy of the digital work. This can be easily appreciated by recognizing if there is no NSOR (i.e., as in the Work 1 example), the Loan usage right will create the copy with the same set of usage rights as the original.

Because exercising the NSOR element determines what usage rights a repository can generate during a transaction, it is “a right that one has to generate, manipulate, modify, dispose of or otherwise derive another right,” which satisfies the Board’s construction. For the same reasons, the NSOR element is also “a right about a right” (the construction of “meta-right” proposed in the Petition) and “a right that, when exercised, creates or disposes of usage rights (or other meta-rights)” (a requirement of ContentGuard’s proposed construction).

ContentGuard nonetheless argues the NSOR element must be considered a “usage right” because the NSOR is consulted during the exercise of the Loan usage right. Paper 15 at 53. But in its arguments, ContentGuard improperly conflates the

use of the NSOR element with the use of the associated Loan usage right. What Stefik actually shows is that exercising the usage right controls the actions being taken on the content (*e.g.*, making a copy or loaning a copy of the digital work), while exercising the NSOR creates or deletes “usage rights” which are attached to the copy of the digital work. Ex. 1032 ¶ 11. Both are exercised, for different purposes, as Petitioners and Dr. Goldberg have clearly and consistently explained.

2. A Participant In The System Can Choose Whether To Exercise An NSOR

ContentGuard contends an NSOR is not a “right” (meta or usage) because it is “unconditionally applied” and the user has no choice about whether to use it. Paper 15 at 49, 52. But Stefik illustrates that a participant in its distribution scheme *can* choose whether to exercise an NSOR by selecting from multiple versions of the same usage right, and furthermore that the use of the NSOR can be subject to conditions. *See, e.g.*, Ex. 1002 at 27:15-33. For example, Stefik describes a digital work with two different versions of a “Loan” right:

```
((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))))))
```

Ex. 1002 at 27:15-33; *see also* Paper 15 at 58-59 (discussing this example). In this example, the first “Loan” right has an NSOR element, as well as a Remaining-Copy-Rights element that can also be exercised to create rights (for the original copy owner), and it requires a daily \$10 fee. Ex. 1002 at 27:27-30. The second “Loan” right has no NSOR element and no rights specified in the Remaining-Copy-Rights. *Id.* at 27:30-33.

When this digital work is loaned to another repository, the NSOR element is only exercised if the first Loan right is selected and the \$10 fee is paid. *Id.* at 27-30; *see also* Ex. 1014 ¶ 76; Ex. 1032 ¶ 13; Ex. 1033 at 113:12-14 (confirming the first Loan right costs \$10 to exercise). The same is true for Remaining-Copy-Rights. As this example shows, a participant in the system may choose to exercise a particular version of a usage right based on its associated NSOR element or its Remaining-Copy-Rights, and must meet the corresponding conditions to do so. Ex. 1032 ¶ 13.

In addition, the NSOR element allows a publisher to control usage rights creation as a digital work is passed down a chain of repositories. *See* Ex. 1014 ¶ 64. For example, the publisher could supply a digital work with multiple versions of a Copy usage right, each with a different NSOR element bearing a different fee. Ex. 1032 ¶¶ 14-16. The publisher could thereby exert control over usage rights creation as a digital work is passed down a chain of repositories, while permitting a

degree of choice (as to which NSOR element to use) by downstream distributors and consumers. *Id.*; *see also* Ex. 1002 at 27:1-28:3; Ex. 1014 ¶¶ 59, 64, 68.

3. The NSOR Element Can Specify Particular Rights By Itself

ContentGuard argues that “an NSOR parameter cannot even be interpreted as a separate right all by itself.” Paper 15 at 54. The point of this argument is unclear, since Dr. Martin admitted the claims do not require that a meta-right has to be interpreted all by itself. Ex. 1033 at 150:23-151:7. ContentGuard nevertheless proceeds to discuss an embodiment of Stefik in which the NSOR parameter is unspecified. Paper 15 at 54. But the embodiments of greater interest (because they use the NSOR to create rights) are those in which the NSOR parameter *is* specified. In those embodiments the NSOR determines usage rights that get added or created, without reference to other usage rights.

The Board recognized this in its Institution Decision. As it correctly found, Stefik teaches that the NSOR grammar element can be implemented by including key words in the NSOR, including “Add.” Paper 9 at 33-34, 37. Indeed, Stefik clearly explains this, stating: “Versions of rights after Add: are added to the current set of rights. Ex. 1002 at 21:53-54. “Add” precisely identifies rights may be generated and do so without reference to other usage rights.

4. The NSOR Is Not “Itself” A Usage Right

ContentGuard’s proposal to require that a meta-right is “not itself a usage right” makes no difference to patentability. Importantly, there is no evidence in the record that the NSOR is “itself” a usage right. Certainly, ContentGuard has never suggested this is the case. In fact, ContentGuard’s expert acknowledged the NSOR exists as a discrete and distinct field within a data structure that also includes the data representing the usage rights. *See, e.g.*, Ex. 2009 ¶¶ 104-105.

ContentGuard argues instead that the NSOR is “*part of the data defining a usage right*,” Paper 16 at 10 (emphasis added). But ContentGuard’s proposed amendment does not preclude a meta-right from being “*part of the data defining a usage right*.” It says, instead, that the meta-right is not *itself* a usage right. Since no party to this proceeding contends that the NSOR is one and the same thing as a usage right, ContentGuard’s proposed carve-out has no effect on whether Stefik anticipates or renders obvious the ’280 claims at issue.

5. The NSOR Does Not “Result In” Actions To Content

The proposed amended claim language “because exercising the meta-right does not result in action to the content” also fails to distinguish proposed substitute claim 37 from Stefik. There is no evidence that using a Stefik NSOR “result[s] in”—i.e., *causes*—an action to content. Critically, ContentGuard’s expert Dr. Martin offered no opinion in his declaration that using the NSOR results in an

action to content. *See* Ex. 1033 at 149:22-150:6. Dr. Martin also agreed the NSOR does *not* cause a usage right to be exercised. *Id.* at 148:19-24 (“... I guess I would agree that the presence of a next set of rights parameter does not cause a particular usage right to be exercised.”).

Instead, the NSOR element creates, destroys, or modifies usage rights, while the usage right results in an action to content. For example, if a Copy right has an NSOR element, exercising the Copy usage right results in an action to content (making a copy) while exercising the NSOR element results in creating or destroying usage rights (*e.g.*, by specifying rights using “Add:” or “Delete:”). Ex. 1032 ¶ 17. ContentGuard’s contention that the NSOR “cannot be exercised without resulting in action to the content” (Paper 16 at 10-11) obscures the fact that it is the usage right that results in action to content, while the NSOR results in action to rights.

To the extent there is any causal relationship between use of the NSOR and exercise of a usage right, it is that the usage right can trigger the exercising of the NSOR, not the other way around. This is how ContentGuard itself describes the system, stating, for example, that “the only way to perform the NSOR parameter’s instructions is to *begin* by exercising a usage right such as transfer, copy, or loan” and “during exercise of the usage right Stefik’s system consults the NSOR parameter to populate the next set of rights for that *post-operation* content.” Paper

16 at 10; Paper 15 at 53 (emphasis added in both); *see also* Ex. 1033 at 148:10-18.

Whether the usage right causes the system to consult the NSOR is immaterial to the proposed substitute claim. That sequence is not one in which exercising the NSOR “result[s] in action to the content.”

At his deposition, Dr. Martin seemed to attribute relevance to the notion that the NSOR is used “in the context of exercising a usage right that does result in actions to content.” Ex. 1033 at 150:3-6. But, again, this cannot distinguish the claims at issue from the NSOR in Stefik, because no claim limitation bars a meta-right from operating “in the context of” a usage right, or otherwise being used contemporaneously with a usage right. The question, under ContentGuard’s proposed construction, is whether exercising the NSOR will “result in” action to content. The evidence demonstrates it does not.

To summarize, there is no evidence in the record establishing that the exercise of the NSOR results in actions to content, so the proposed amendment does not help ContentGuard to distinguish Stefik. Whether exercising the usage right results in exercising the NSOR is irrelevant, as is whether the NSOR is exercised contemporaneously with actions that are being taken on content. Because there is no evidence that using the NSOR “results in” an action to content, the NSOR is not distinguishable from a meta-right in ContentGuard’s proposed substitute claim.

B. Stefik Discloses The “Determining” Step Of Proposed Substitute Claim 37

ContentGuard’s argument that Stefik does not disclose the “determining” step (Paper 16 at 11) is incorrect on multiple grounds.

First, ContentGuard argues that Stefik does not describe a mechanism for a repository to evaluate whether the recipient is entitled to receive the rights identified in an NSOR parameter. But, to exercise a usage right with a corresponding NSOR element, the repository must first determine whether all conditions are met. A particularly telling example is the one in which two Loan rights, only one of which has an NSOR element, are available, where one requires payment of a \$10 fee and the other is not subject to a fee. Ex. 1002 at 27:15-33. In this example, a \$10 fee must be paid to exercise the Loan right that includes the NSOR element. If the \$10 is not paid, the user can still borrow the work, but he cannot exercise the particular NSOR element. *Id.* at 27:30-31. The \$10 fee condition controls whether the NSOR element can be exercised. *Id.* at 27:26-33; Ex. 1032 ¶ 19. Similarly, if a Loan right contains a “Security Level” parameter, the Loan right cannot be exercised unless the requesting repository meets the minimum security level requirement. *See* Ex. 1002 at 26:16-28 (discussing “SC:3” element); Ex. 1032 ¶ 19.

Second, ContentGuard asserts that the server repository checks conditions of its own usage rights to determine if it can perform a requested transaction. But the

“determining” claim step does not prohibit checking conditions of usage rights to determine whether a recipient is entitled to the rights specified in the NSOR.

ContentGuard’s argument presumes the existence of a limitation that does not appear in the claim text or any claim construction at issue.

Third, ContentGuard contends that Stefik’s disclosure of checking security conditions is somehow different from checking the requestor’s entitlement to receive the rights specified by the NSOR parameter. But this procedure checks a characteristic of the requesting repository to determine whether it is entitled to receive the rights specified in the NSOR. *See, e.g.*, Ex. 1002 at 26:28-36 (“Copy or transfer operations can take place only with repositories of security level three or greater.”). The consumer repository will be deemed entitled to the rights specified by the NSOR element only if the server repository determines that the consumer repository has sufficient security. Otherwise, those rights will not be created. Ex. 1032 ¶ 19.

Fourth, ContentGuard claims that Stefik’s decision-making procedure for performing a transaction is completely independent of whatever rights are specified in the NSOR field. To the extent this is meant as a distinction from the proposed substitute claim, it has no basis in the claim text or claim constructions.

C. Stefik Renders The Separate Exercise Of A Meta-Right And A Usage Right Obvious

ContentGuard’s proposed substitute claim 37 does not require the meta-right to be exercised separately from a usage right. As discussed above, the only new restrictions it adds on the meta-right are that it “is not itself a usage right” and “exercising the meta-right does not result in action to the content.” A meta-right could be exercised together with (or immediately after) a usage right without running afoul of either of these restrictions.

Even if the proposed substitute claim did require a meta-right to be exercised separately from a usage right, this claim would have been obvious in view of Stefik. *See* Paper 9 at 41-42 (finding original claim obvious if interpreted to require separate exercise of meta-right and usage right). This is not a case where there are a multitude of choices with different consequences. Instead, there are only two options for when the NSOR might be exercised relative to when a usage right is exercised: at the same time or at a different time. Ex. 1014 ¶ 98. A person of ordinary skill in the art would have been experienced in segmenting a transaction into a set of actions, and it would have been common sense to perform those actions at different times. Ex. 1014 ¶¶ 98-99. Adjusting the timing so that the NSOR element was exercised separately from an action such as “Copy” or “Transfer” thus would have been one of “a finite number of identified, predictable solutions” that was readily within the grasp of a skilled person. Ex. 1014 ¶¶ 98-99;

KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 421 (2007); *see also id.* at 417 (“If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability.”). Importantly, exercising the NSOR at a different time than the usage right is exercised would have no practical consequences for operation of the Stefik scheme; the NSOR would still be used according to its established function disclosed in Stefik, with only the timing and/or circumstances of use being modified. Ex. 1032 ¶ 22; *KSR*, 550 U.S. at 417 (nonobviousness requires “more than the predictable use of prior art elements according to their established functions”). This means the same conditions could be applied for determining the consumer’s entitlement to the right, and all claim steps are disclosed or obvious.

Nonetheless, ContentGuard argues there is no motivation to adapt Stefik to include “meta-rights that are distinct from usage rights and are exercisable to create new rights without resulting in action to digital content.” Paper 16 at 20-21. But this argument incorrectly paraphrases the amended claim language, which only requires that the meta-right is not “itself” a usage right and does not “result in” actions to content. *See* §§ III.A.4-A.5, above. To the extent the proposed substitute claim is nonetheless read to require separate exercise of a usage right and meta-right, one of ordinary skill would have had a reason to pursue that known option when contemplating ways to exercise the meta-right, as the Board previously found. Paper 9 at 42.

Stefik provides several reasons to make this modification. Stefik discloses that the usage rights can be combined to create complex distribution channels, and it describes numerous distribution models supported by usage rights. Ex. 1002 at 45:20-24. For example, Stefik shows a scenario where a separately issued “distribution license” is used to control whether downstream parties can make copies of a digital work. Ex. 1002 at 46:1-44. Parties with the license can make copies, while parties that do not have the distribution license cannot do so. *Id.* at 46:20-27, 46:40-44; *see also id.* at 26:46-52 (showing analogous usage rights statements). Stefik therefore suggests to the skilled person that it is desirable to manage rights at one level of a distribution chain in order to control rights granted at a subsequent, downstream level of the chain. Ex. 1032 ¶ 23; *see also* Ex. 1033 at 126:16-23 (creator of a work “is able to exert control over that work further down the distribution chain”).

Stefik also describes many other examples of using licenses and shows various combinations of usage rights to control which distributors can create copies of a digital work and sell them to consumers and whether additional fees can be added to the digital works. *E.g.*, Ex. 1002 at 45:45 (“Paid Distributors”), 47:14 (“Distribution Trees”), 47:65 (“Limited Reuse”), 48:18 (“Commercial Libraries”). Stefik explains that these distribution scenarios permit “fine grained control of the rights and fees.” Ex. 1002 at 48:6-7. Stefik therefore expressly provides a way to

solve the same problem the '280 patent purports to address, namely allowing authors to maintain adequate rights control in multi-level distribution schemes so they get paid for use of their work. Ex. 1001 at 2:22-48; *see also* Ex. 1033 at 124:13-125:1 (“Distribution Trees” model is a type of multi-tiered distribution), 126:16-23 (creator of a work “is able to exert control over that work further down the distribution chain”), 141:16-21 (same, for publisher).

To further these goals, a person of ordinary skill would have found it obvious to exercise the NSOR element separately from a usage right. Ex. 1032 ¶ 24. As the Stefik specification itself explains, that “those skilled in the art” would have made “various alternative, modifications, variations or improvements” of the disclosed embodiments. Ex. 1002 at 52:1-6.

Stefik also teaches the desirability and feasibility of adding, removing, or modifying the rights for a digital work without any action on content. For example, Stefik discloses an “Embed” usage right that allows a distributor or retailer to add its own fees to a digital work. Ex. 1002 at 41:54-56; *id.* at 26:6-10. When Stefik’s Embed usage right is exercised to add a new fee condition, there is no action on the content. Ex. 1032 ¶ 25-26. (This is very similar to a meta-right that modifies conditions on a usage right, which Dr. Martin acknowledged was part of the '280 patent scheme. Ex. 1033 at 61:16-62:14.) Stefik thus suggests using rights that can be exercised separately from an action to content to change other rights, and

teaches a process for doing so. The Embed usage right with an NSOR element could also be exercised to add usage rights without performing an action on content. Ex. 1032 ¶¶ 25-27.

IV. ContentGuard Has Failed To Demonstrate Written Description Support For The Proposed Substitute Claim

The motion to amend should be denied for the independent reason that Petitioner has not shown that the proposed substitute claim is supported by the written description of the '280 patent or applications to which it claims benefit under 35 U.S.C. § 120.

It is Petitioner's burden to demonstrate written description support for the proposed substitute claim. *Idle Free Sys., Inc. v. Bergstrom, Inc.*, IPR2012-00027, Paper 26 at 8 (PTAB June 11, 2013). The written description doctrine requires that the original disclosure of the application relied upon reasonably conveys to a person of ordinary skill in the art that the inventor had possession of the claimed subject matter as of the filing date. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (*en banc*). This obligation is not limited to the new language Petitioner proposes to add, but must be satisfied for the entirety of the amended claim. *Corning Optical Comm'ns RF, LLC, v. PPC Broadband, Inc.*, IPR2014-00441, Paper 19 at 4 (PTAB Oct. 30, 2014) ("[I]t is inadequate to show written description support for just the feature added by the proposed substitute

claim. Instead, the Patent Owner must show written description support for the entire claim.”).

ContentGuard’s motion to amend includes only a cursory written description discussion. Paper 16 at 3-5. Its entire analysis of each of the relevant patent applications consists of a bare assertion that support for the proposed substitute claim can be found in the application, followed by a string of citations with short parenthetical descriptions. *Id.* ContentGuard cites no expert support anywhere in its written description discussion. Paper 16 at 3-5. And it is unclear, at best, which limitation(s) ContentGuard’s string of citations are intended to correspond to.

With regard to the amended language in particular, ContentGuard does not identify where in any of the three applications the new language of the claim appears. Because the claim language does not appear in the same words in the original disclosure, Patent Owner must explain “why a person of ordinary skill in the art would have recognized that the inventor possessed the claimed subject matter as a whole[.]” *Nichia Corp. v. Emcore Corp.*, IPR2012-00005, Paper 27 at 4 (PTAB June 3, 2014). ContentGuard’s parenthetical explanations fall short of this mark.

Instead of making the required showing, ContentGuard simply points to passages in the applications—specifically, paragraph [0044] of the ’121 application, paragraph [0035] of the ’701 application, and pp. 2-3 of the ’624

provisional application—and then makes the conclusory assertion that these passages are “explaining that meta-rights are different from usage rights because exercising meta-right does not act on content.” Paper 16 at 4-5. But in the ’121 and ’701 applications, these passages do not establish that “exercising [a] meta-right does not act on content.” Instead, they state that “[w]hen meta-rights are exercised, new rights are created from the meta-rights or existing rights are disposed as the result of exercising the meta-rights.” Ex. 2011 ¶ [0044]; Ex. 2012 ¶ [0035]. Thus, while the cited paragraphs establish that meta-rights create or dispose of other rights, they fail to show the inventors possessed an invention in which meta-rights *exclude* actions to content. Indeed, the same paragraph highlights the operational features meta-rights and usage rights have in common: “the mechanism for exercising and enforcing a meta-right can be the same as that for a usage right.” Ex. 2011 ¶ [0044]; Ex. 2012 ¶ [0035]. The ’624 provisional application further undercuts ContentGuard’s assertion. The portion cited in ContentGuard’s motion to amend states: “When exercising rights, actions result, for example *viewing* or *using* content.” Ex. 2013 at 2 (emphasis in original). By using the generic term “rights,” this sentence suggests that meta-rights *can* result in actions to content. Ex. 1032 ¶ 21.

Finally, because the ’280 patent relies entirely on the Stefik patent for its written description support for “the mechanism for exercising” rights, the only

plausible source of written support for the proposed amendment to the “exercising” step is the very same prior art reference that establishes the claims are unpatentable. Indeed, rather than disclosing any new process for exercising a “meta-right,” the ’280 patent simply cross-references the same processes used for exercising rights in the Stefik patents. Ex. 1001 at 7:23-24 (“At a high level the process of enforcing and exercising meta-rights are the same as for usage rights”), 7:46-49 (“Thus, the mechanism for exercising and enforcing a meta-right can be the same as that for a usage right. For example, the mechanism disclosed in U.S. Pat. No. 5,634,012 can be used.”), 9:38-40 (“Meta-rights manager module 510 exercises the requested meta-rights in a manner similar to known procedures for usage rights”). This creates an intractable quandary for ContentGuard—if Stefik is the sole basis of written description support for the proposed claim amendment it must necessarily also be the case the claimed method is unpatentable over this very same Stefik disclosure. Conversely, if the claim language does distinguish Stefik, it lacks written description support. Either way, the amended claims are not patentable, and the motion should be denied.

V. The Proposed Substitute Claim Is Not “Substantially Identical” To Original Claim 1

Although the substitute claim remains unpatentable over Stefik, ContentGuard’s proposed amendments nevertheless do change the scope of claim 1 relative to the way the Board found it was defined. Thus, if the motion is

granted, the Board should decline ContentGuard's invitation to find that the substitute claim is "substantially identical" to original claim 1. *See* Trial Practice Guide at 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012).

Claim 1 contains no prohibition on "meta-rights" resulting in actions to content. As noted above, an earlier application to which a benefit claim is made by the '280 patent envisioned using "rights" in general to authorize viewing or using content, meaning no rights (meta or otherwise) excluded actions to content. The '280 patent does not contain a contrary definition. While the '280 patent does state what *must* happen when meta-rights are exercised ("new rights are created from the meta-rights or existing rights are disposed as the result of exercising the meta-rights"), this statement does not preclude *additional* things from happening upon exercise of a meta-right. Ex. 1001 at 7:29-31. Nothing in the plain language of claim 1 excludes the possibility of meta-rights resulting in actions to content either. Proposed amended claim 37 alters the scope of claim 1 by restricting "meta-rights" to a subset of those encompassed by claim 1: namely, those which do not result in action to content. Claim 1 is thus broader in scope relative to amended claim 37.

This distinction, of course, is one without patentable significance. It is also unconnected to which claim construction standard is used to construe the claims. Here, ContentGuard incorrectly argues its proposed amendment reflects a different interpretation that would necessarily be provided to claim 1 under the interpretive

standard used in district courts. *See* Paper 16 at 24-25. But there is no actual difference in the result the Board would have reached using the other standard, because the Board found and used an express definition of “meta-right” in the ’280 patent to construe this term. Paper 9 at 16-17. Express definitions work the same way in a *Phillips* analysis as they do under BRI: they define the claim term. *See In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994) (analyzing, in an appeal from the Board of Patent Appeals and Interferences, whether the specification included an express definition for a claim term); *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (*en banc*) (“[T]he specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor’s lexicography governs.”). Thus, even if the Board had applied the district court standard instead of BRI, its result would have been the same.

That ContentGuard proposes to introduce verbiage from an actual district court’s construction does not require the Board to find that the substitute claim is “substantially identical.” Regardless of how the district court interpreted “meta-right,” the proposed amendment does narrow the scope of the claim relative to how the Board found it was expressly defined. Therefore, the Board should not excuse ContentGuard in advance from the potential application of intervening rights. If there is disagreement between the Board’s and the district court’s constructions,

that simply favors leaving the issue of intervening rights for later consideration by a district court if it ever becomes necessary.

Alternatively, if the proposed amendment is found to not narrow the claim relative to the district court standard, that would further confirm that the motion fails to “respond to a ground of unpatentability involved in the trial.” 37 C.F.R. § 42.121(a)(2). ContentGuard’s motion avoids taking a position on whether the proposed amendment narrows the claim relative to the Board’s construction. Paper 16 at 24-25. And ContentGuard’s expert could not say whether the proposed amendment narrowed the claim. *See* Ex. 1033 at 77:11-79:7, 79:11-80:6. He also declined to offer any opinion whether the proposed amendment addresses the ground of unpatentability involved in the Institution Decision. *Id.* at 80:7-86:19, 87:5-19; *see also id.* at 87:20-24 (stating that his opinion on patentability did not depend on whether the amendment was entered). ContentGuard cannot have it both ways. The amendment must narrow the claim, or be unresponsive to the ground of unpatentability at issue, or both.

VI. Conclusion

For the above reasons, Petitioners request that the Board deny ContentGuard’s motion to amend the ’280 patent.

Dated: December 22, 2015

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CERTIFICATE OF SERVICE

I hereby certify that on this 22nd day of December, 2015, a copy of this Notice of Stipulation has been served in its entirety by email on counsel for Petitioners and on the following counsel of record for Patent Owner:

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC. and APPLE INC.,
Petitioners,

v.

CONTENTGUARD HOLDINGS, INC.
Patent Owner

Case CBM 2015-00040¹

U.S. Patent 7,774,280

Filed October 4, 2004

Issued August 10, 2010

Title: SYSTEM AND METHOD FOR MANAGING TRANSFER OF
RIGHTS USING SHARED STATE VARIABLES

Attorney Docket No. 20318-134361

Customer No: 22242

**PATENT OWNER'S REPLY IN SUPPORT OF CONTINGENT
MOTION TO AMEND UNDER 37 C.F.R. § 42.121**

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¹ Case CBM2015-00160 has been joined with this proceeding.

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I. INTRODUCTION

Petitioners' response to Patent Owner's contingent motion to amend challenges the patentability of proposed substitute claim 37 solely on written description grounds and in view of the prior art Stefik '012 patent. It does not dispute Patent Owner's showing of patentability over the other references identified as the closest known prior art. The specific objections to the motion are addressed below.

II. THE PROPOSED AMENDMENT RESPONDS TO THE PATENTABILITY ISSUES RAISED

The proposed substitute claim 37 amends original claim 1 to expressly require that a meta-right "is not itself a usage right because exercising the meta-right does not result in action to the content," and to provide proper antecedent basis for this language. In its Institution Decision, the Board applied a broader definition of "meta-right" under the claim construction standard applicable in CBM proceedings. Applying this broader construction, the Board found that Stefik raised issues of patentability as to claim 1 and dependent claims 5 and 11. (Paper 9 at 15-17 and 43.) The proposed substitute claim expressly recites characteristics of meta-rights not included in the Board's initial construction. In the event that the Board maintains its initial construction of meta-right, and ultimately finds claim 1 unpatentable over Stefik using that construction, the proposed substitute claim would distinguish Stefik on grounds unavailable under that construction. The

amendment is thus directly related and responsive to issues of patentability involved in this proceeding.

Contrary to Petitioners' representation, the motion does not characterize the amendment as having no effect on the scope or meaning of claim 1. Patent Owner has shown that the scope of the amended claim is substantially identical to the scope given to the original claim in pending district litigation, which is a distinct issue relevant to intervening rights. (Paper 16 at 24-25.) That does not make the substitute claim any less responsive to the grounds of patentability in this proceeding, which are based on a broader claim construction than the district court applied.

III. THE SUBSTITUTE CLAIM IS NOT ANTICIPATED BY STEFIK

The Goldberg declaration submitted in support of the Petition asserts that Stefik discloses meta-rights because certain usage rights may include a NSOR grammar element identifying rights to be added to or deleted from the usage rights for the transferred digital work. According to this theory, the right being exercised is the encapsulating usage right. (See, e.g., Ex. 1014 at ¶72 (“the meta-right is ‘Loan,’ which allows the repository that receives that right to create Play and Delete usage rights for subsequent distribution”) and ¶80 (“the Loan right allows a repository to create new rights, Play and Delete, when a Loan transaction is completed”.) Dr. Goldberg further opined that exercising the alleged meta-right

involves action to content. (*Id.* at ¶79 (“the sending repository will then exercise the meta-right by transmitting to the requesting repository a copy of the work with rights as specified by the ‘Next-Set-Of-Rights’”).) Petitioners wholly embraced this analysis. (Paper 1 at 64, 68-69.) Although he recharacterized Loan as a usage right encapsulating a meta-right during deposition (Ex. 2010 at 37:7-21), Dr. Goldberg has always maintained that Stefik does not disclose any right that creates new rights and is exercisable independent of exercising the encapsulating usage right. (*Id.* at 37:23-38:10, 53:11-24, 54:5-15.)

Petitioners’ assertion that Stefik’s NSOR field is itself a right exercisable to create new rights without resulting in actions to content contradicts the analysis of their own expert. Indeed, after Petitioners’ response to the motion to amend was filed, Dr. Goldberg reaffirmed that rights creation in Stefik occurs when the usage right containing the NSOR field is exercised, and that Stefik’s system is incapable of processing the NSOR field outside of the process of exercising the encapsulating usage right. (Ex. 2023 at 88:17-23 and 91:22-92:9.)

These undisputed facts alone demonstrate that the Stefik NSOR element does not disclose an exercisable right that is not a usage right. The only exercisable rights disclosed in Stefik are usage rights, with the NSOR field affecting the behavior of the system during the exercise of usage rights. The NSOR field is only accessed and used during the process of exercising the encapsulating usage right to

transfer content to a requesting repository; its only purpose is to control rights associated with the transferred copy. Petitioners' assertion that one may choose whether to process a particular NSOR field by selecting a particular version of encapsulating usage right is of no consequence. This only further demonstrates that the NSOR field is not a right per se, but an element of a selectable usage right.

The argument that new rights can be created using the NSOR field without resulting in actions to content is also contrary to Stefik's actual disclosure. The NSOR field is only processed as part of the sequence of steps constituting exercise of a usage right. Petitioners now describe the encapsulating usage right as acting on content and the NSOR field as acting on rights, and further argue that the NSOR field does not cause the usage right to be exercised. Those assertions miss the mark. The substitute claim requires that "exercising the meta-right does not result in actions to the content." The only way to process the NSOR field is to exercise the encapsulating usage right to trigger an integrated sequence of events resulting in both the transfer of content and the creation of rights for the transferred copy. Petitioners' arguments also directly contradict their prior assertions that the analogous exercising step in Stefik involves transmitting a copy of the digital work to the requesting repository together with the rights specified by the NSOR field. (Paper 1 at 68, citing Ex. 1014 at ¶79.) That Stefik provides no mechanism for

using the NSOR field to create rights without resulting in actions to content is dispositive against Petitioners' anticipation challenge.

Petitioners also assert that Patent Owner misreads the "determining" step. But the opposite is true. This limitation explicitly requires determining whether the consumer is entitled "to the rights specified by the meta-right," yet Petitioners fail to identify any mechanism in Stefik for a repository to evaluate whether a consumer is entitled to the specific rights identified in the NSOR field. Petitioners do not challenge Dr. Martin's opinion that Stefik's decision making procedure for performing a transaction is independent of whatever rights are specified in the NSOR field. Their own expert has not identified any mechanism in Stefik for placing conditions on the processing of the NSOR field itself. (Ex. 2023 at 101:5-19.) The substitute claim is not anticipated by Stefik for this additional reason.

IV. THE SUBSTITUTE CLAIM IS NOT OBVIOUS IN VIEW OF STEFIK

Petitioners have not shown that the subject matter of the substitute claim as a whole would have been obvious in view of Stefik. Their argument addresses only whether it would have been obvious to "exercise" a NSOR field at a different time than the usage right is exercised or separate from the exercise of the usage right. However, the substitute claim as a whole requires addressing, at a minimum, the obviousness of transferring rights using a meta-right that (i) is provided as an exercisable right, (ii) is not a usage right, (iii) can be exercised to create new rights

without resulting in actions to content, and (iv) can only be exercised upon a determination that the rights consumer is entitled to a right specified by the meta-right. Petitioners have not done so, and their arguments ignore both the claim as a whole and Stefik's disclosure at a rather fundamental level.

The Martin declaration explains the complex interdependency between the processing of the NSOR parameters and the exercise of the associated usage right in Stefik. (Ex. 2009 at ¶¶60-63, 70-72.) The NSOR field has no purpose in Stefik outside of this specific architecture and functionality. It cannot simply be removed from the usage right and provided as a separately exercisable right because the NSOR field must be consulted during the exercise of Stefik's transport usage rights.

Moreover, Stefik provides no mechanism for placing conditions on the rights identified in the NSOR field themselves, and fails to disclose a repository functioning to first determine whether the consumer is entitled to the specific rights identified in the NSOR field before creating the rights named in the NSOR field for the transferred copy of the content. Rather, the NSOR rights are created automatically upon exercising the encapsulating usage right.

Modifying Stefik to practice the method of the substitute claim would have required significant changes to its design and operation. Petitioners do not address how the proposed modifications are consistent with the teachings of Stefik as a

whole. They fail to explain exactly how Stefik could have been modified to practice the claimed subject matter without rendering the NSOR feature of Stefik unsatisfactory for its intended purpose, or how this could have been accomplished without changing Stefik's fundamental principles of operation.

Petitioners do not provide any cogent rationale supporting a motivation to modify Stefik. They assert that Stefik describes numerous distribution models. But each model involves only usage rights, and Stefik does not suggest the models could be improved using meta-rights as claimed.

Petitioners resort to mischaracterizing Stefik's "Embed" usage right in arguing that Stefik teaches permitting rights to be added to a digital work without actions to content. The cited passage describing the Embed right states that the Embed transaction is initiated with a request to a server that includes a destination address. (Ex. 1002 at 41:54-63.) Upon completing opening transaction steps, "the server transmits the requested contents and data to the requestor according to the transmission protocol." (*Id.* at 42:3-4.) Rights are also transmitted with the contents according to the NSOR field, and the requestor repository then "records the contents, data and usage rights and embeds the work in the destination file." (*Id.* at 42:4-11.)

Dr. Goldberg's second declaration directly contradicts this disclosure in asserting that there is no action to content when the Embed right is exercised. (Ex.

1032 at ¶25.) It provides an example in which a Copy right is used to transfer the content prior to exercising the Embed right. (*Id.* at ¶27.) Dr. Goldberg confirmed at deposition that the example is not disclosed in Stefik, and he conceded that Stefik’s disclosure of the Embed transaction describes transmitting the requested contents to the requestor. (Ex. 2023 at 102:15-103:20 and 105:22-106:6.) He agreed that Stefik does not disclose any way of embedding content in a shell or another digital work besides the Embed transaction, and that embedding cannot occur without transferring the work from one repository to another. (*Id.* at 114:16-115:3.) Stefik’s Embed transaction, and its entire scheme for modifying downstream rights using the NSOR field of usage rights, teach directly away from exercising rights to create new rights without resulting in actions to content.

V. THE SUBSTITUTE CLAIM HAS WRITTEN DESCRIPTION SUPPORT

Patent Owner has demonstrated written description support for the entire substitute claim. Petitioners’ challenge improperly assumes that a person of ordinary skill in the art would not consider the full teachings of the cited application passages. The argument focuses on one sentence stating that exercising a meta-right creates new rights or disposes of existing rights, which Petitioners contend does not show possession of an invention in which meta-rights exclude actions to content. (Paper 22 at 21.) This ignores the more full teaching of the same paragraph that meta-rights differ from usage rights in that exercising usage rights

results in actions to content. Additional passages cited in the motion further explain the characteristics and functions of meta-rights, how meta-rights can be used in complex distribution networks, and the processes involved in exercising meta-rights to create new rights. None of these additional disclosures suggest that exercising meta-rights may result in actions to content. They further confirm the direct teaching distinguishing meta-rights from usage rights on the basis that exercising usage rights results in actions to content.

Petitioners also give an artificial reading to a single sentence of the '624 provisional application. (Paper 22 at 21, citing Ex. 2013 at 1.) A person of ordinary skill would understand the word “rights” in the quoted sentence to refer to usage rights, such as the stated examples of rights to view or use content. Even if Petitioners were correct that written description support is lacking in the '624 provisional (they are not), that would only affect the priority entitlement of the substitute claim. *See Nichia Corp. v. Emcore Corp.*, IPR2012-00005, Paper 27 at 3-4 (PTAB June 3, 2014). It is not grounds for denying the motion.

Petitioners raise a false dilemma in asserting that the Stefik reference is the sole basis of written description support for the substitute claim and therefore must anticipate. The '280 specification indicates that the “mechanism” for exercising and enforcing meta-rights can be the same as that disclosed in Stefik, namely, repositories. (Ex. 1001 at 7:36-39.) It does not incorporate meta-rights from Stefik

or any description of procedures for exercising and enforcing meta-rights. As discussed, Stefik contains no such description. The ‘280 specification indicates that meta-rights processing is similar to usage rights processing only “[a]t a high level.” (*Id.* at 7:23-24.) It discloses meta-rights manager 510 in Fig. 5, which has functions not disclosed in Stefik directed to processing requests to exercise meta-rights in accordance with the specific steps recited in original claim 1 and the substitute claim. (*Id.* at 6:47-60, 8:56-9:13, 9:33-43.) The ‘280 specification also illustrates several DRM scenarios involving the exercise and enforcement of meta-rights (e.g., *id.* at Figs. 9-16), none of which are disclosed in Stefik.

VI. THE SUBSTITUTE CLAIM IS SUBSTANTIALLY IDENTICAL TO ORIGINAL CLAIM 1 WITHIN THE MEANING OF 35 U.S.C. ¶252

Patent Owner has demonstrated that the scope of proposed substitute claim 37 is substantially identical to the scope that original claim 1 would have as interpreted by a district court, such that it is entitled to a Board determination that the amended claim and original claim are substantially identical within the meaning of 35 U.S.C. 252. (*See* USPTO Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012).) Petitioners’ objections to this request lack merit. The U.S. District Court for the Eastern District of Texas construed claim 1 using the *Phillips* standard applicable in litigation. (Ex. 2001 at 5-9, 106.) Petitioners do not demonstrate or even assert that the district court applied *Phillips* erroneously or otherwise construed claim 1 erroneously. Nor do they challenge Patent Owner’s

showing that the substitute claim has substantially the same scope that original claim 1 has under that construction.

It is irrelevant to the Section 252 issue that amended claim 37 is narrower than original claim 1 under the construction applied by the Board in its Institution Decision. And rather than addressing the scope actually given to claim 1 in the pending litigation, Petitioners speculate that the Board would have applied *Phillips* differently to reach a different construction than the district court. Yet Petitioners fail to demonstrate that original claim 1 could *properly* be construed under *Phillips* to have a scope other than the scope determined by the district court.

Petitioners' remaining assertions are easily addressed. The proposed amendment is contingent on the Board ultimately finding claim 1 unpatentable applying the construction of meta-rights set forth in the Institution Decision. It both narrows the claim relative to the Board's initial construction and results in the same scope that original claim 1 would have in litigation.

While not pertinent to the intervening rights issue, Petitioners assert incorrectly that Dr. Martin could not opine whether the amendment addresses a ground of unpatentability involved in the Institution Decision. The cited testimony reflects Dr. Martin's reluctance to speculate in response to questions that he understood were asking how the Board would view the proposed amendment. Dr. Martin's declaration maintains that original claim 1 is patentable over Stefik even

under the Board’s claim construction of “meta-right,” but also opines that the amended claim distinguishes Stefik on additional grounds that may not be available under the Board’s construction. Contrary to Petitioners’ argument, Patent Owner need not amend the claim to have a scope narrower than it would have in litigation for the proposed amendment to be responsive to a ground of unpatentability. Here, the amendment is both responsive and results in the same claim scope as original claim 1 has in litigation.

VII. CONCLUSION

If original claim 1 is found unpatentable, Patent Owner respectfully requests that the Board grant its Contingent Motion to Amend and, further, that the Board enter a finding that the substitute claim 37 is substantially identical to that of original patent claim 1 within the meaning of 35 U.S.C. ¶252.

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §42.6(e), the undersigned hereby certifies that a true copy of the foregoing PATENT OWNER’S REPLY IN SUPPORT OF CONTINGENT MOTION TO AMEND UNDER 37 C.F.R. § 42.121 is being served on counsel for petitioners.

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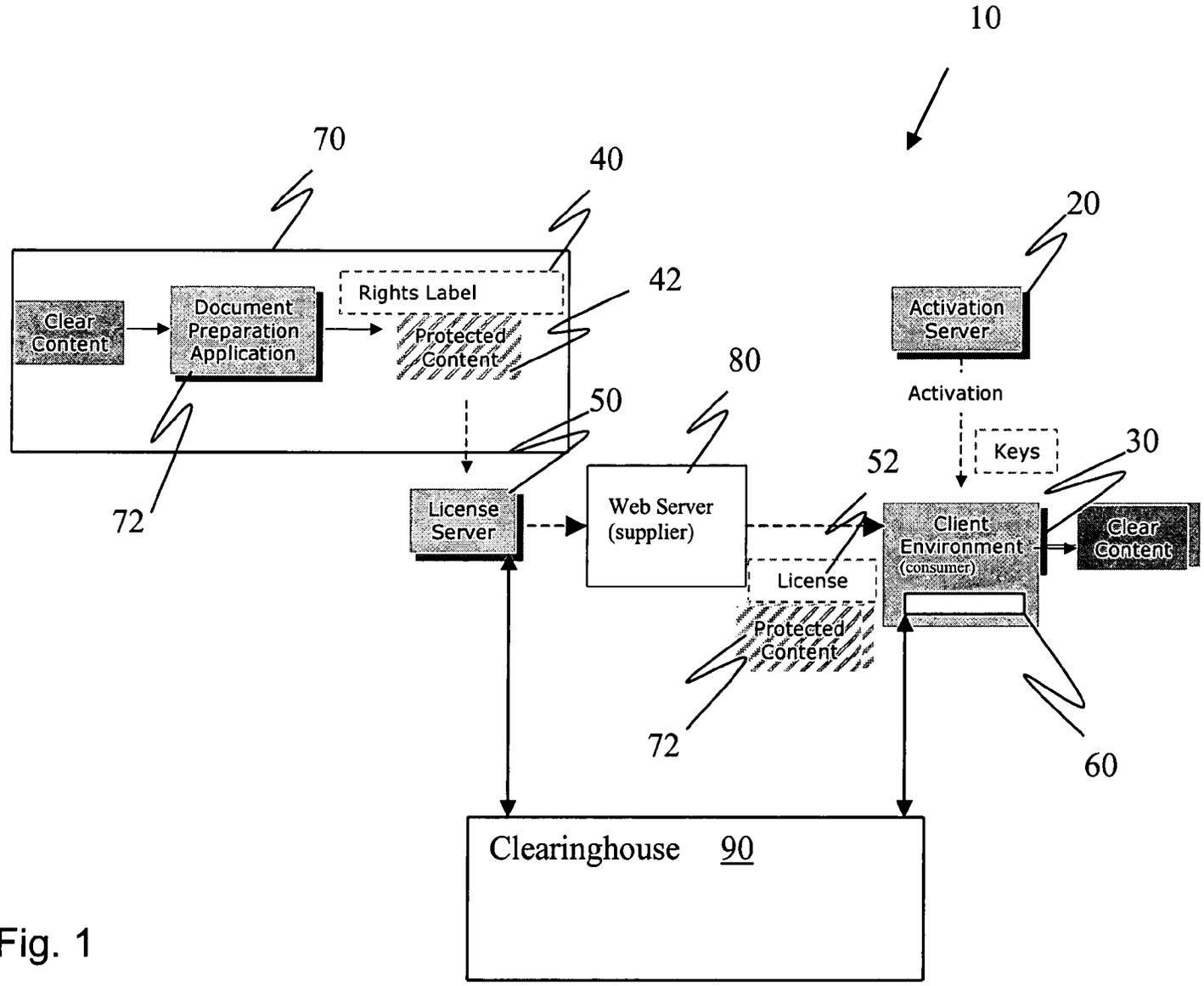


Fig. 1

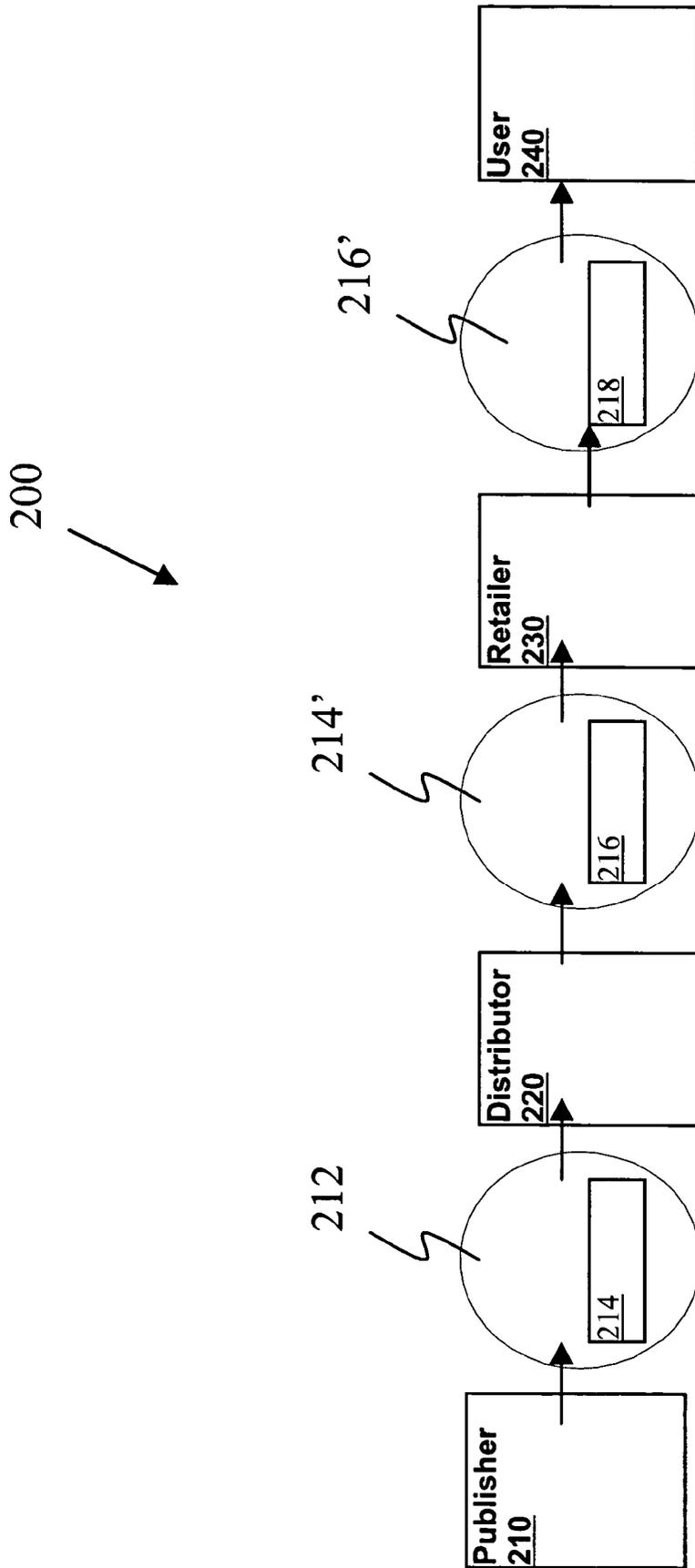


Fig. 2

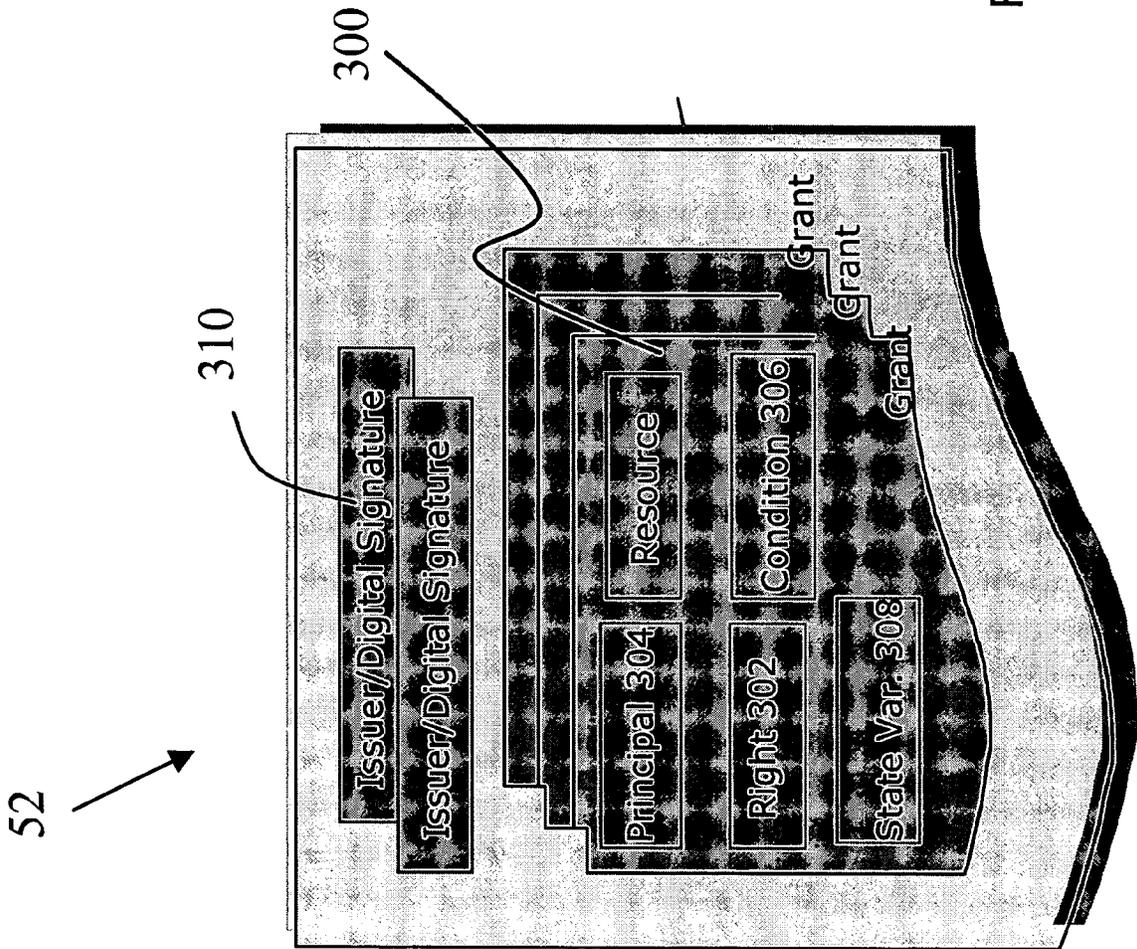


Fig. 3

52

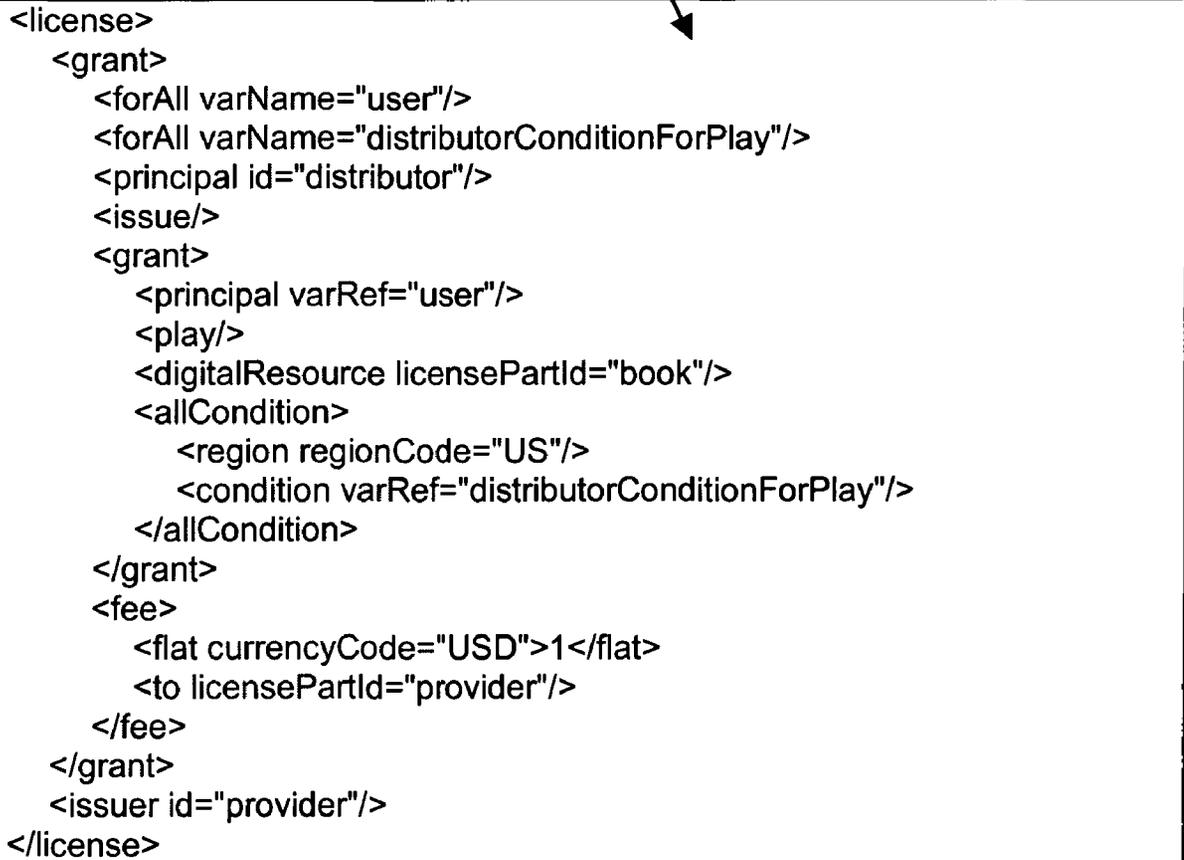


Diagram 52 is a rectangular box containing XML code. An arrow points from the number '52' above to the top-left corner of the box. The code is as follows:

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<license>  
  <grant>  
    <forAll varName="user"/>  
    <forAll varName="distributorConditionForPlay"/>  
    <principal id="distributor"/>  
    <issue/>  
    <grant>  
      <principal varRef="user"/>  
      <play/>  
      <digitalResource licensePartId="book"/>  
      <allCondition>  
        <region regionCode="US"/>  
        <condition varRef="distributorConditionForPlay"/>  
      </allCondition>  
    </grant>  
    <fee>  
      <flat currencyCode="USD">1</flat>  
      <to licensePartId="provider"/>  
    </fee>  
  </grant>  
  <issuer id="provider"/>  
</license>
```

Fig. 4

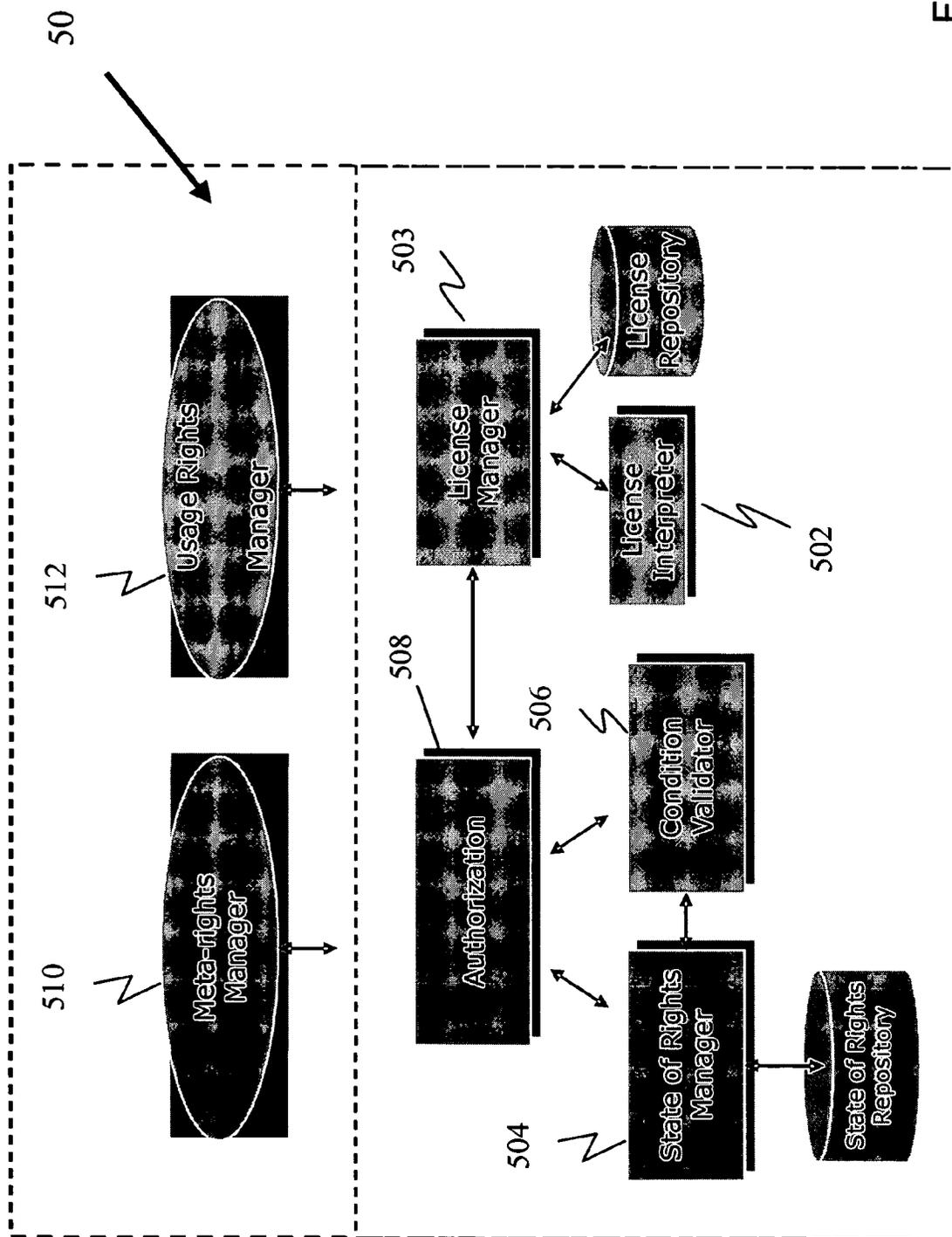


Fig. 5

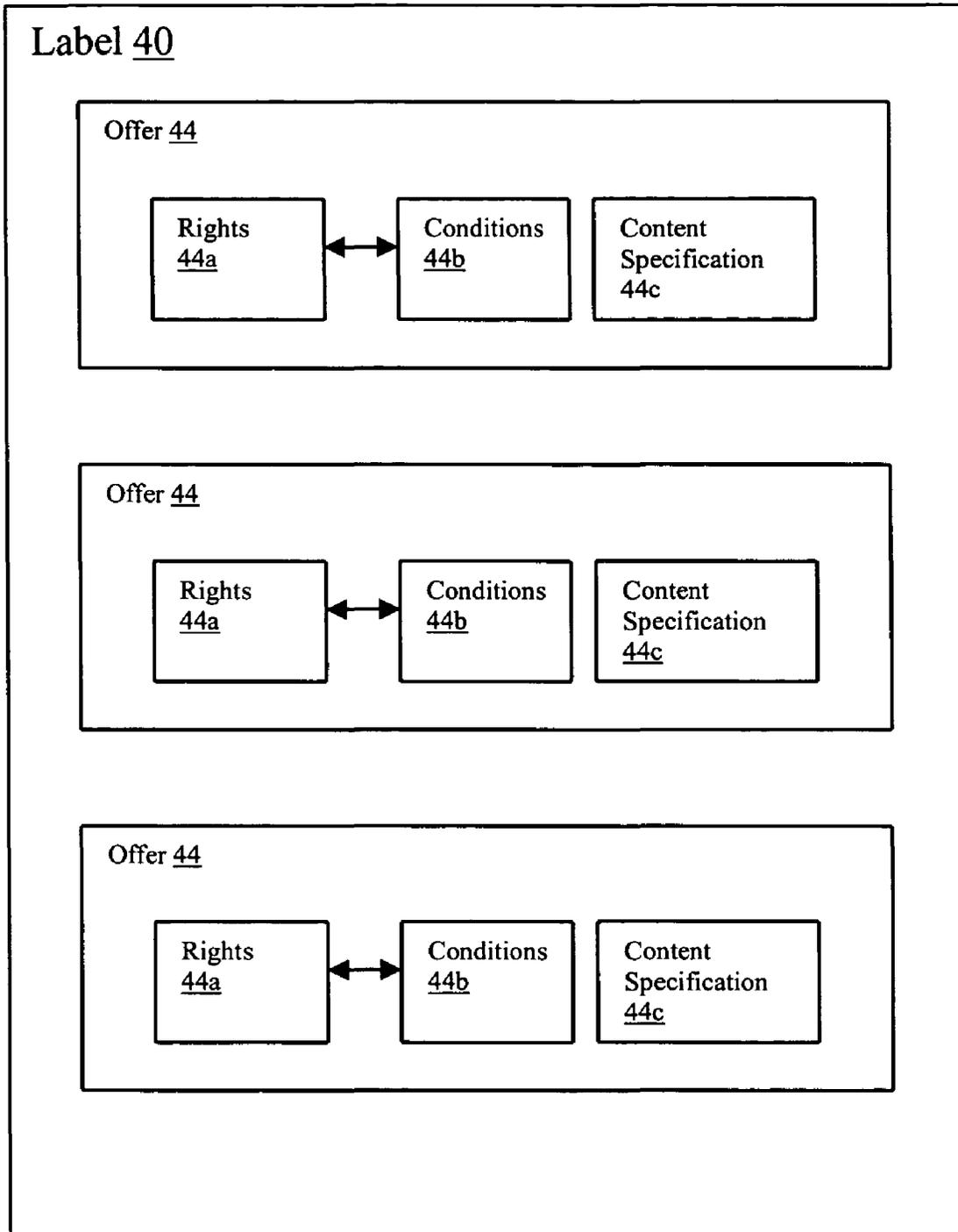


Fig. 6

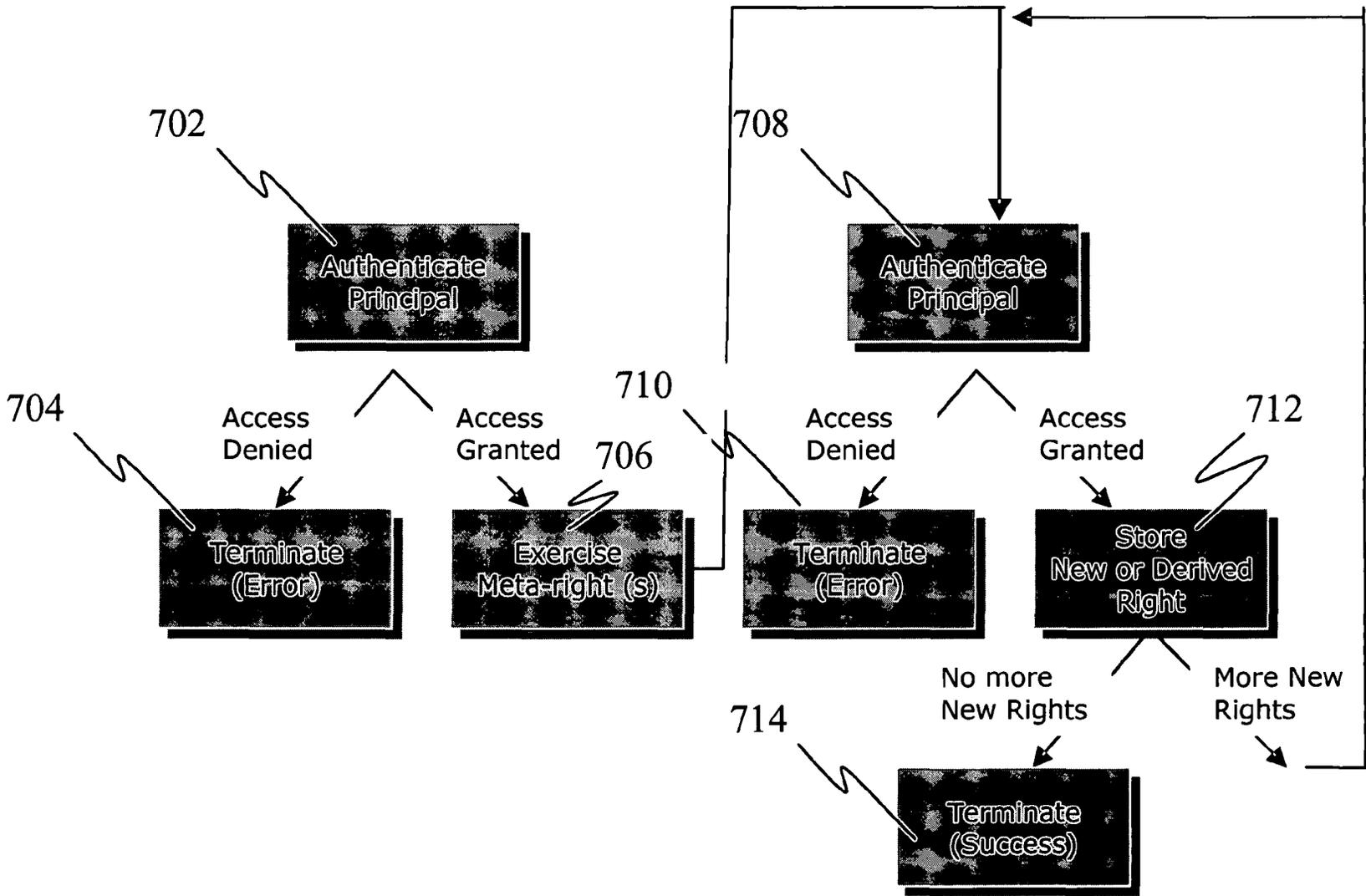


Fig. 7

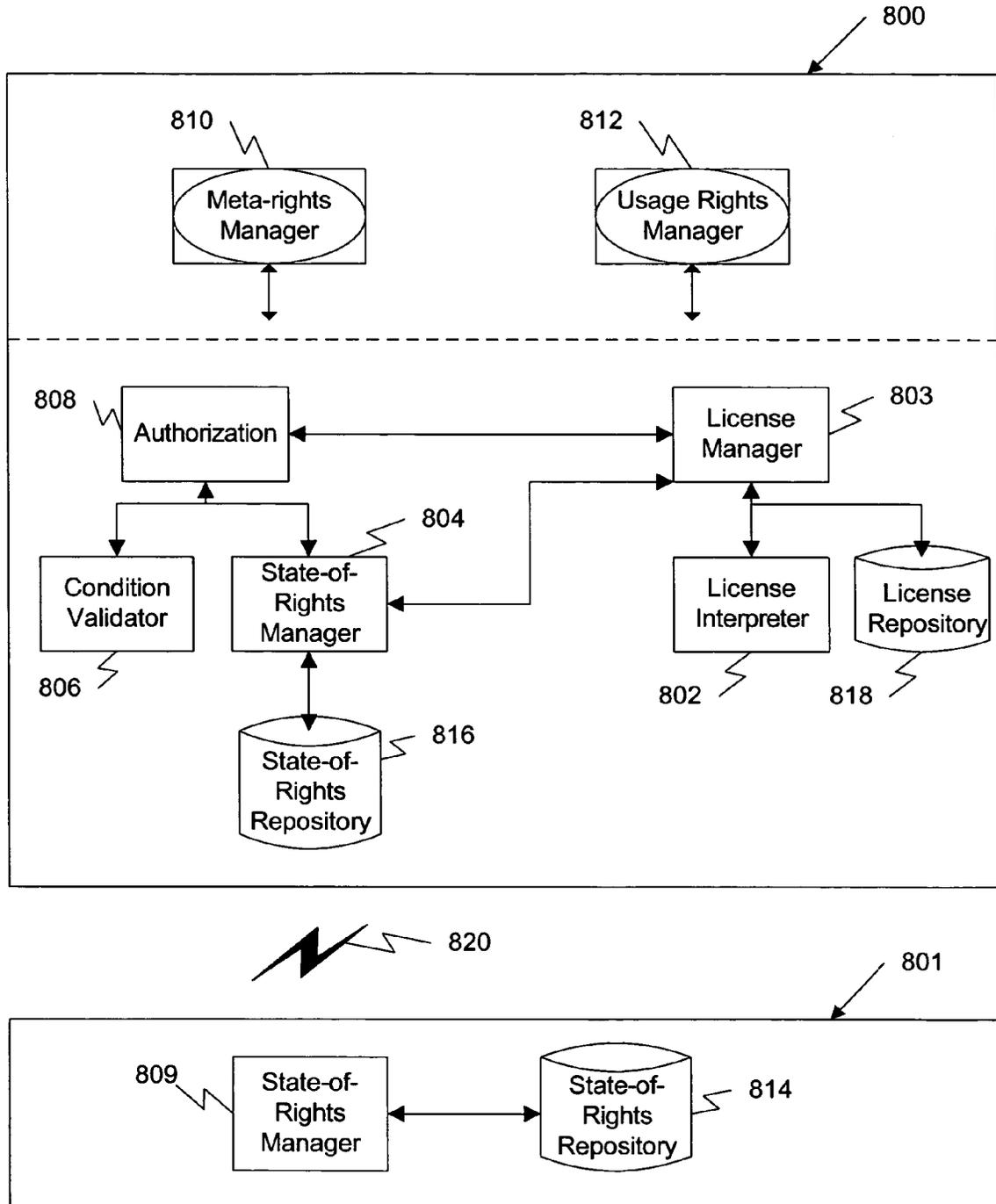


Fig. 8

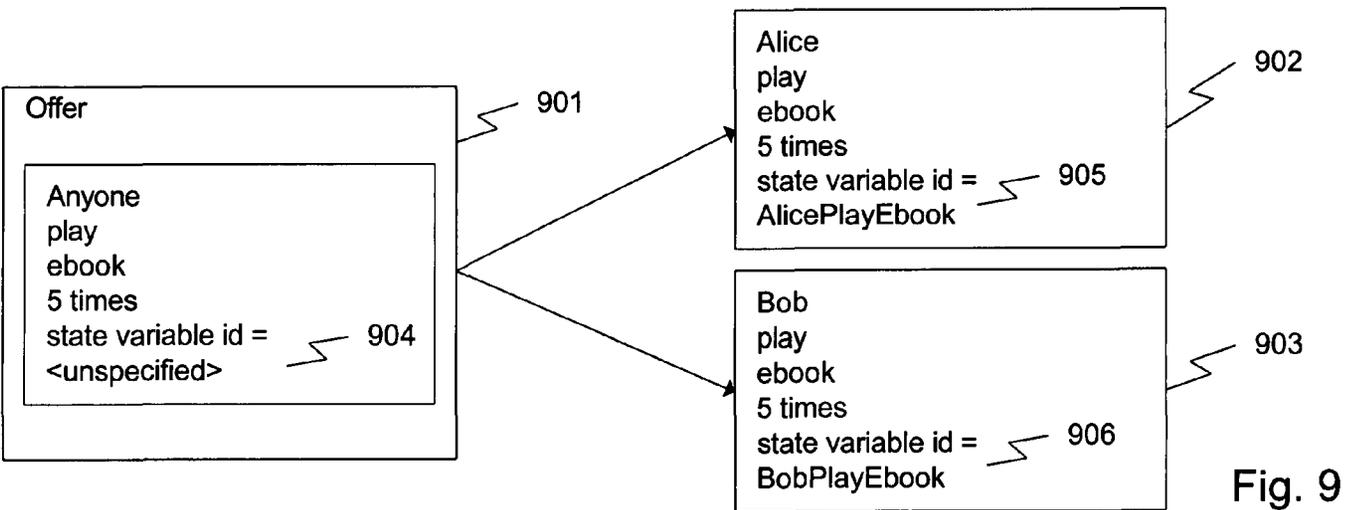


Fig. 9

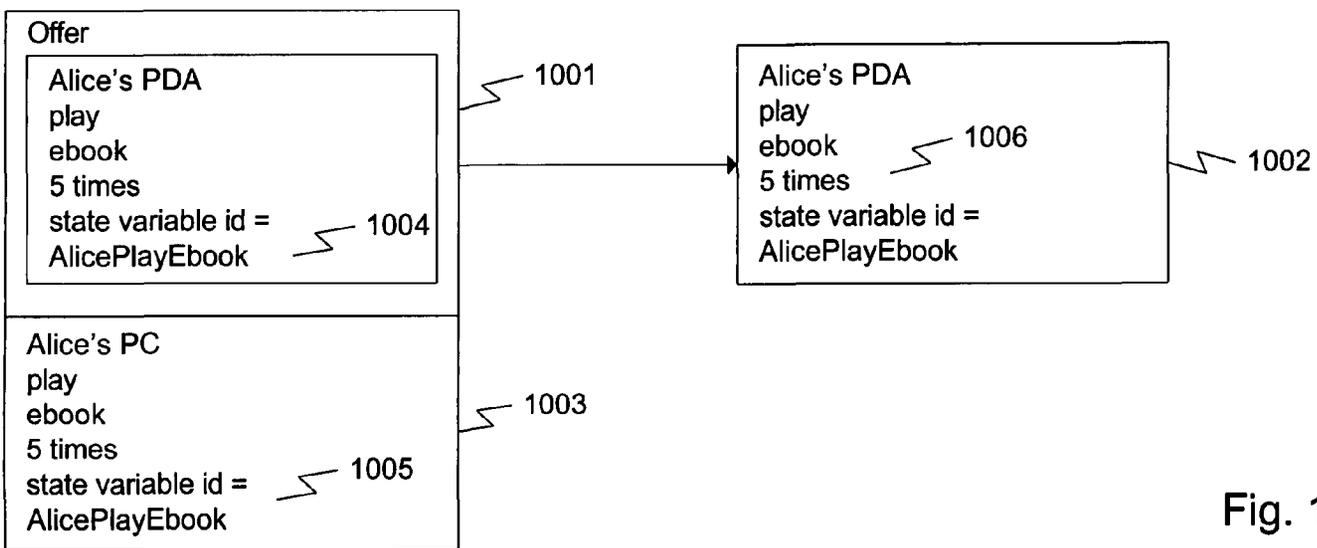


Fig. 10

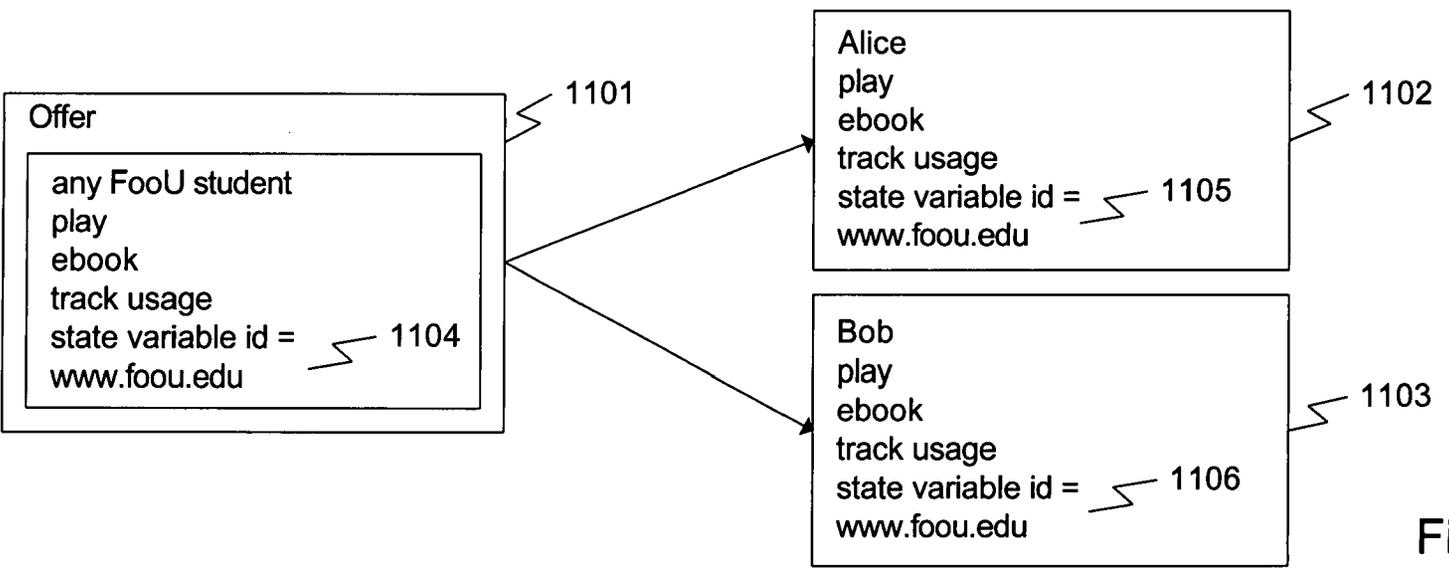


Fig. 11

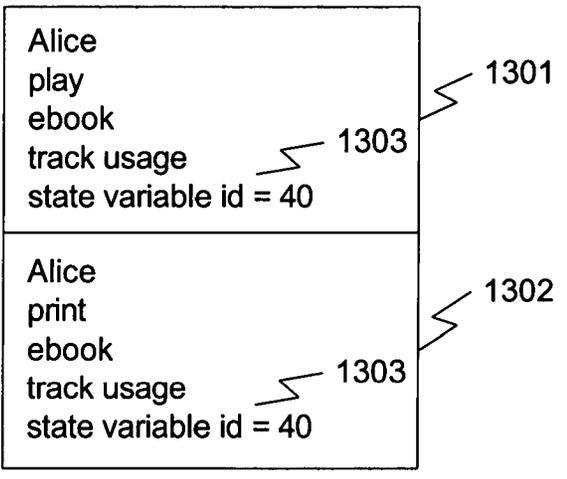


Fig. 13

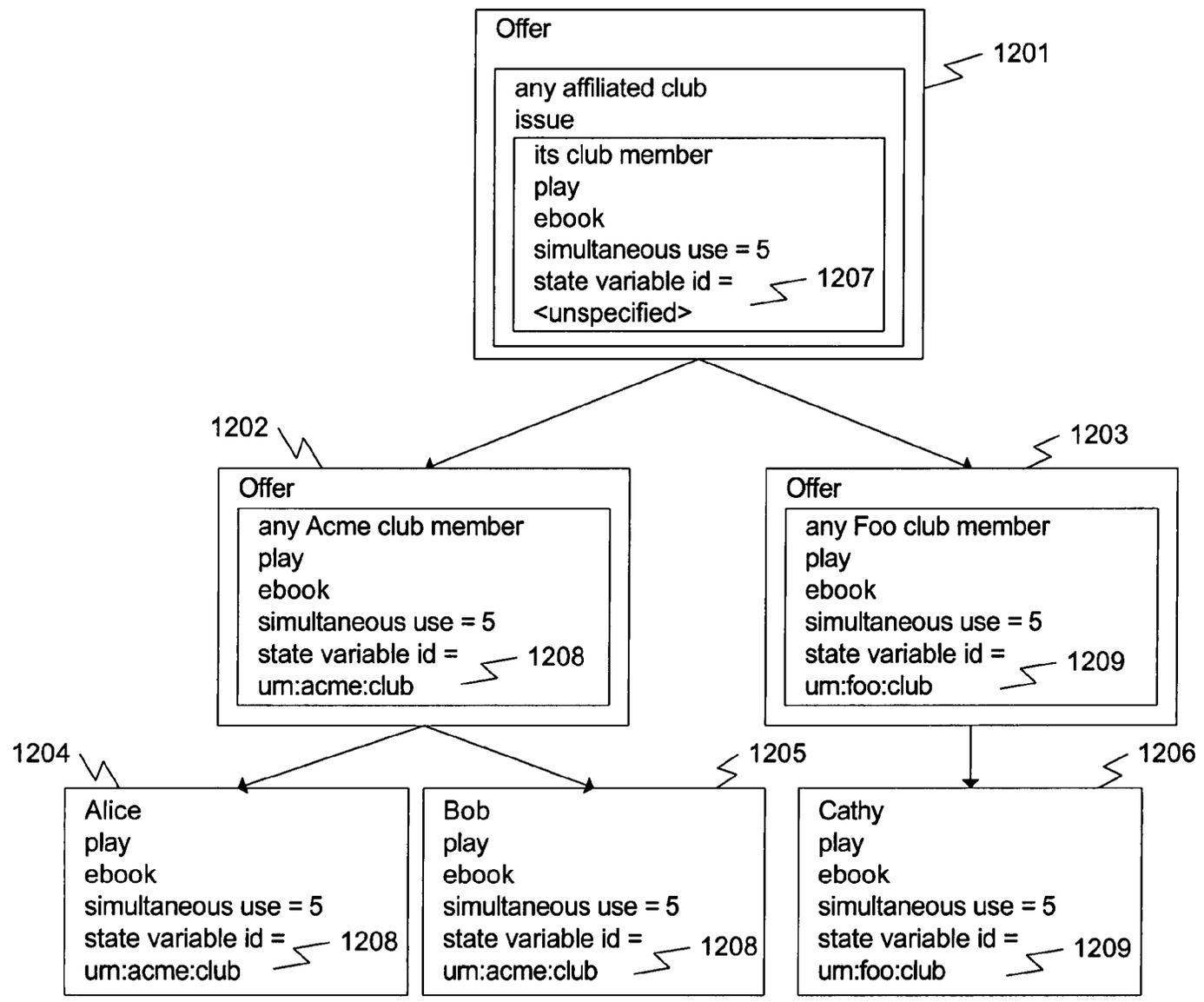


Fig. 12

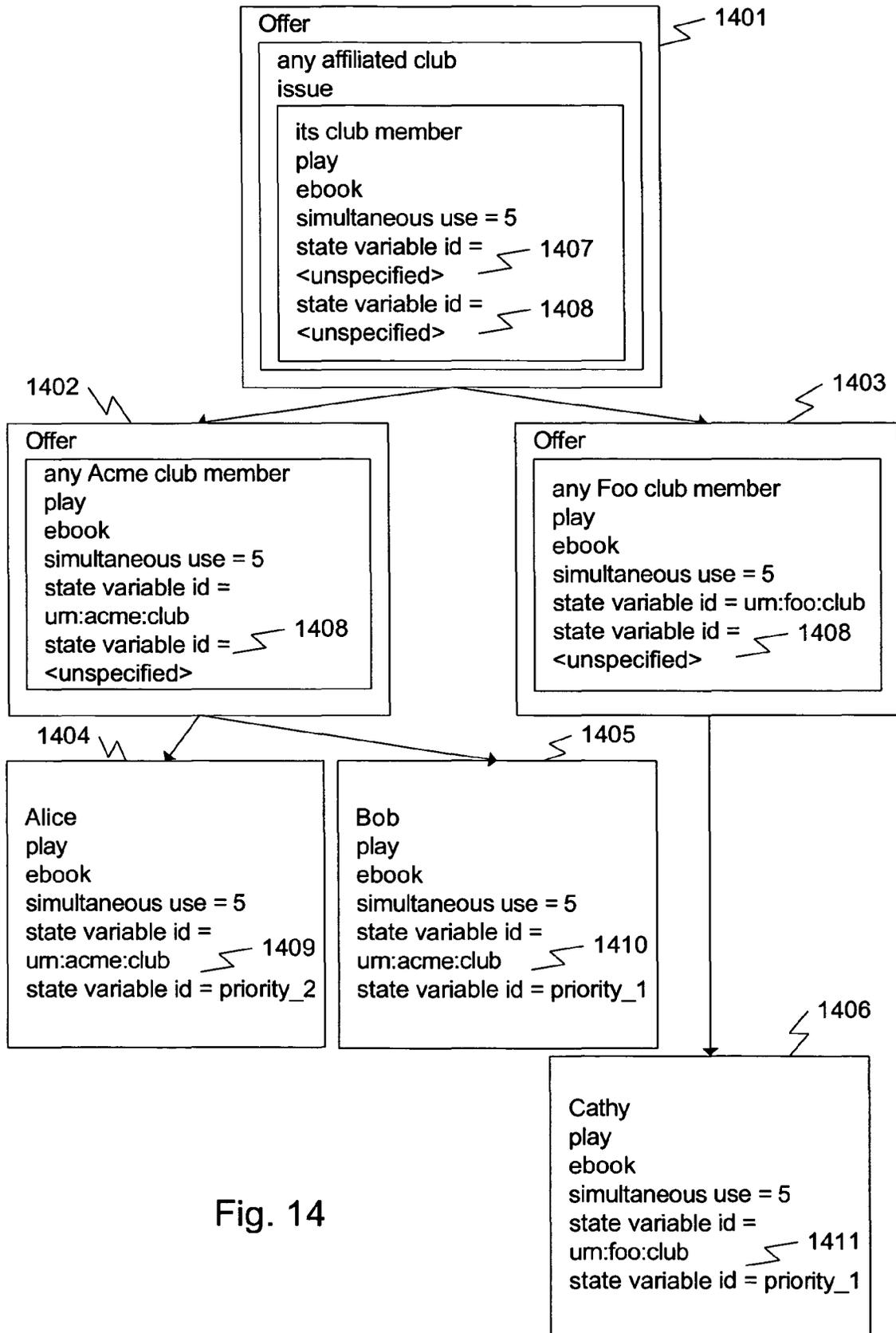


Fig. 14

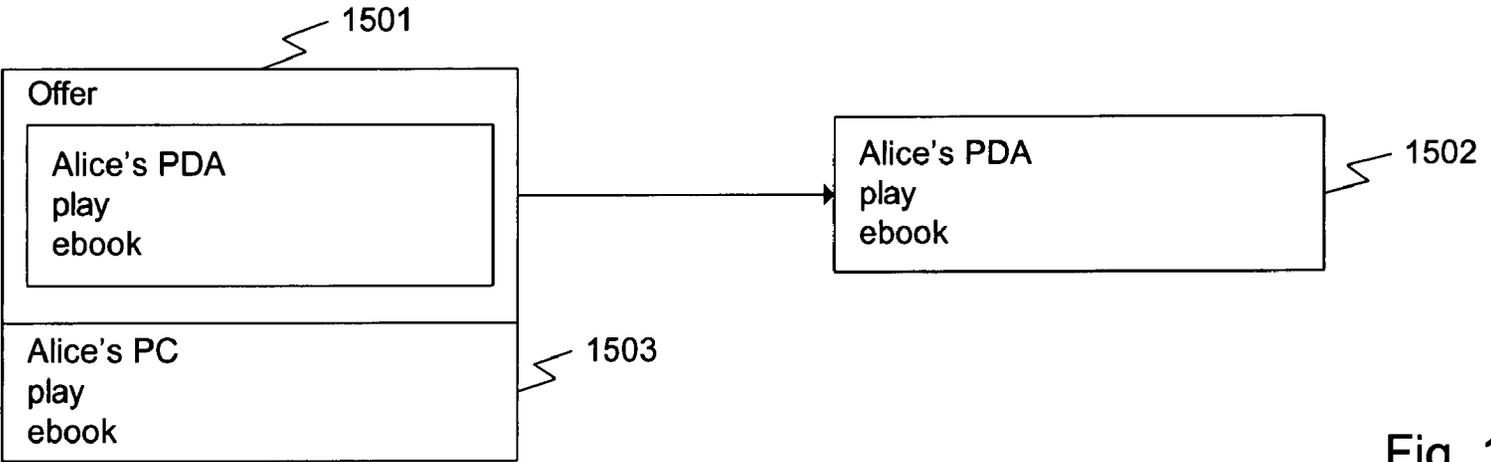


Fig. 15

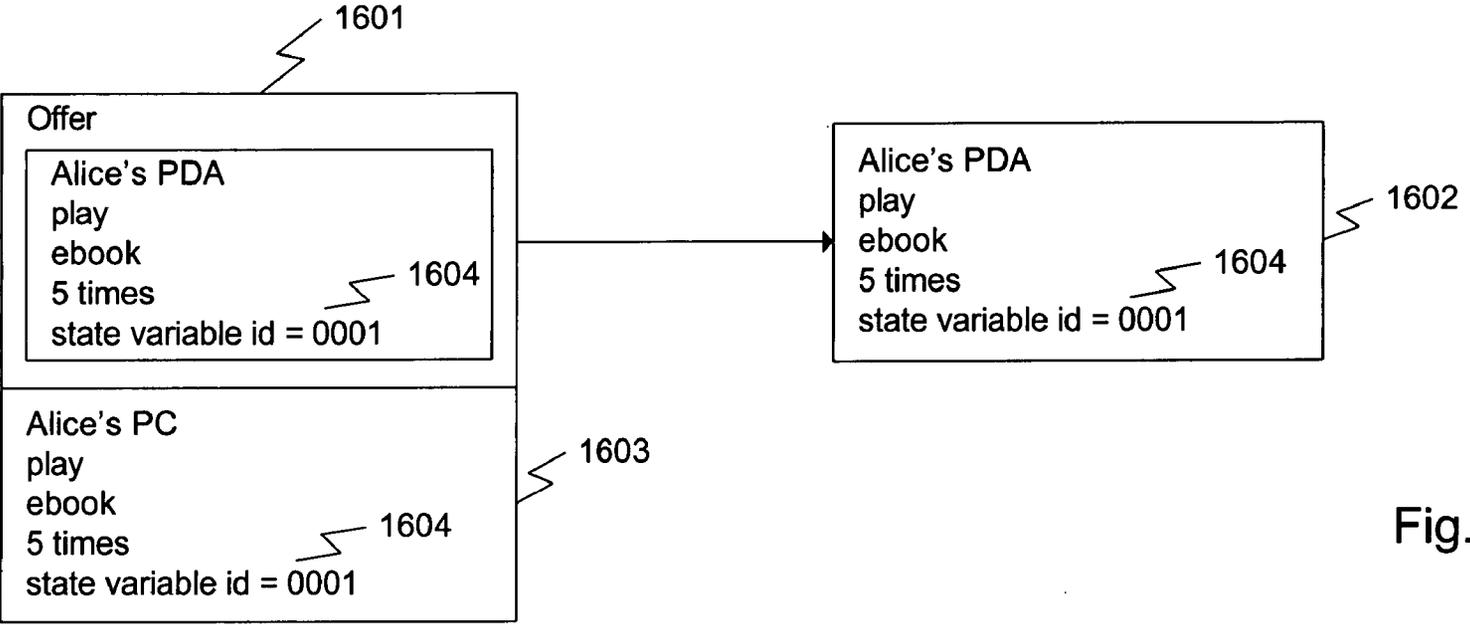


Fig. 16

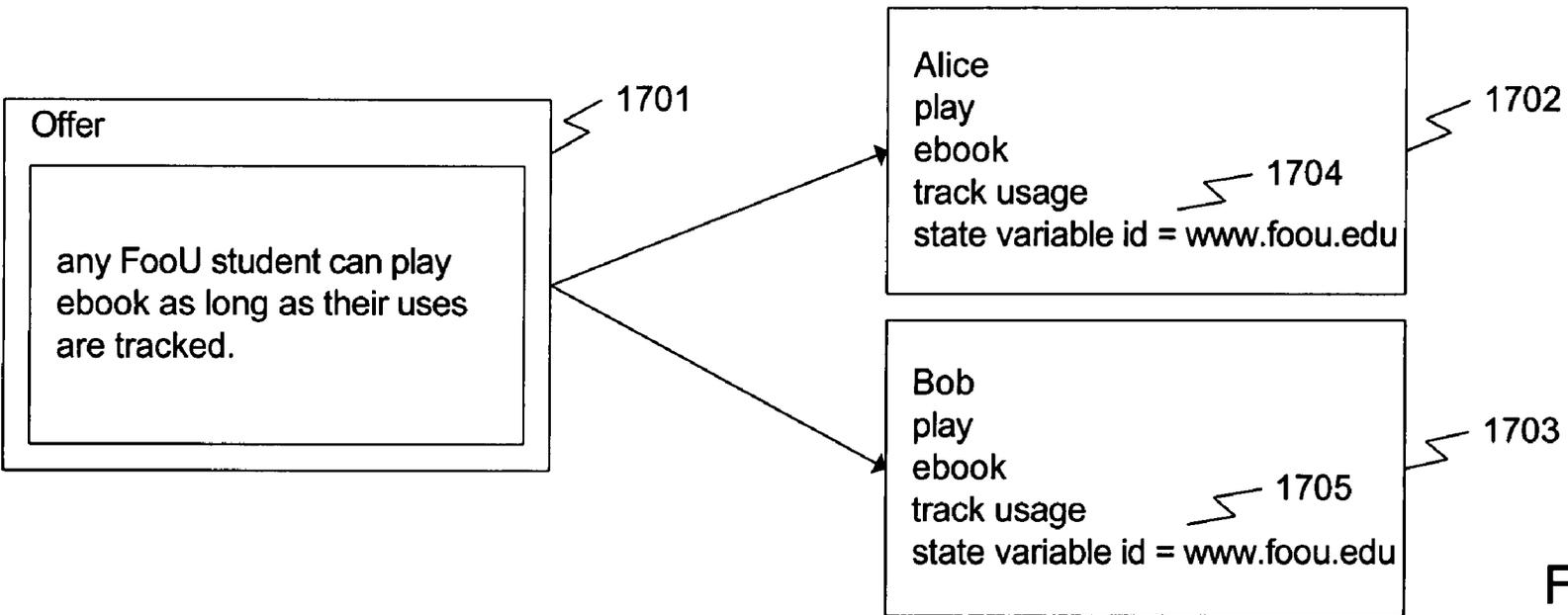


Fig. 17

**SYSTEM AND METHOD FOR MANAGING
TRANSFER OF RIGHTS USING SHARED
STATE VARIABLES**

RELATED APPLICATION DATA

This application is a continuation-in-part application of co-pending application Ser. No. 10/162,701 filed on Jun. 6, 2002, which claims benefit from U.S. provisional applications Ser. Nos. 60/331,624, 60/331,623, and 60/331,621 filed on Nov. 20, 2001, and U.S. provisional applications Ser. Nos. 60/296,113, 60/296,117, and 60/296,118 filed on Jun. 7, 2001, the entire disclosures of all of which are hereby incorporated by reference herein.

FIELD OF THE INVENTION

The present invention generally relates to rights transfer and more particularly to a method, system and device for managing transfer of rights using shared state variables.

BACKGROUND OF THE INVENTION

One of the most important issues impeding the widespread distribution of digital works (i.e. documents or other content in forms readable by computers), via electronic means, and the Internet in particular, is the current lack of ability to enforce the intellectual property rights of content owners during the distribution and use of digital works. Efforts to resolve this problem have been termed "Intellectual Property Rights Management" ("IPRM"), "Digital Property Rights Management" ("DPRM"), "Intellectual Property Management" ("IPM"), "Rights Management" ("RM"), and "Electronic Copyright Management" ("ECM"), collectively referred to as "Digital Rights Management (DRM)" herein. There are a number of issues to be considered in effecting a DRM System. For example, authentication, authorization, accounting, payment and financial clearing, rights specification, rights verification, rights enforcement, and document protection issues should be addressed. U.S. Pat. Nos. 5,530, 235, 5,634,012, 5,715,403, 5,638,443, and 5,629,980, the disclosures of which are incorporated herein by reference, disclose DRM systems addressing these issues.

Two basic DRM schemes have been employed, secure containers and trusted systems. A "secure container" (or simply an encrypted document) offers a way to keep document contents encrypted until a set of authorization conditions are met and some copyright terms are honored (e.g., payment for use). After the various conditions and terms are verified with the document provider, the document is released to the user in clear form. Commercial products such as CRYPTOLOPES™ and DIGIBOXES™ fall into this category. Clearly, the secure container approach provides a solution to protecting the document during delivery over insecure channels, but does not provide any mechanism to prevent legitimate users from obtaining the clear document and then using and redistributing it in violation of content owners' intellectual property.

In the "trusted system" approach, the entire system is responsible for preventing unauthorized use and distribution of the document. Building a trusted system usually entails introducing new hardware such as a secure processor, secure storage and secure rendering devices. This also requires that all software applications that run on trusted systems be certified to be trusted. While building tamper-proof trusted systems is a real challenge to existing technologies, current market trends suggest that open and untrusted systems, such as PC's and workstations using browsers to access the Web, will

be the dominant systems used to access digital works. In this sense, existing computing environments such as PC's and workstations equipped with popular operating systems (e.g., Windows™, Linux™, and UNIX) and rendering applications, such as browsers, are not trusted systems and cannot be made trusted without significantly altering their architectures. Of course, alteration of the architecture defeats a primary purpose of the Web, i.e. flexibility and compatibility.

As an example, U.S. Pat. No. 5,634,012, the disclosure of which is incorporated herein by reference, discloses a system for controlling the distribution of digital documents. Each rendering device has a repository associated therewith. A predetermined set of usage transaction steps define a protocol used by the repositories for enforcing usage rights. Usage rights define one or more manners of use of the associated document content and persist with the document content. The usage rights can permit various manners of use such as, viewing only, use once, distribution, and the like. Usage rights can be contingent on payment or other conditions. Further, a party may grant usage rights to others that are a subset of usage rights possessed by the party.

DRM systems have facilitated distribution of digital content by permitting the content owner to control use of the content. However, known business models for creating, distributing, and using digital content and other items involve a plurality of parties. For example, a content creator may sell content to a publisher who then authorizes a distributor to distribute content to an on-line storefront who then sells content to end-users. Further, the end users may desire to share or further distribute the content. In such a business model, usage rights can be given to each party in accordance with their role in the distribution chain. However, the parties do not have control over downstream parties unless they are privy to any transaction with the downstream parties in some way. For example, once the publisher noted above provides content to the distributor, the publisher cannot readily control rights granted to downstream parties, such as the first or subsequent users unless the publisher remains a party to the downstream transaction. This loss of control combined with the ever increasing complexity of distribution chains results in a situation, which hinders the distribution of digital content and other items. Further, the publisher may want to prohibit the distributor and/or the storefront from viewing or printing content while allowing an end user receiving a license from the storefront to view and print. Accordingly, the concept of simply granting rights to others that are a subset of possessed rights is not adequate for multi-party, i.e. multi-tier, distribution models.

SUMMARY OF THE INVENTION

The exemplary embodiments of the present invention are directed to a method, system and device for transferring rights adapted to be associated with items from a rights supplier to a rights consumer, including obtaining a set of rights associated with an item, the set of rights including meta-rights specifying derivable rights that can be derived from the meta-; determining whether the rights consumer is entitled to the derivable rights specified by the meta-rights; and deriving at least one right from the derivable rights, if the rights consumer is entitled to the derivable rights specified by the meta-rights, wherein the derived right includes at least one state variable based on the set of rights and used for determining a state of the derived right.

Still other aspects, features, and advantages of the present invention are readily apparent from the following detailed description, simply by illustrating a number of exemplary

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embodiments and implementations, including the best mode contemplated for carrying out the present invention. The present invention is also capable of other and different embodiments, and its several details can be modified in various respects, all without departing from the spirit and scope of the present invention. Accordingly, the drawings and descriptions are to be regarded as illustrative in nature, and not as restrictive.

BRIEF DESCRIPTION OF THE DRAWINGS

Exemplary embodiments of this invention will be described in detail, with reference to the attached drawings in which:

FIG. 1 is a schematic illustration of a rights management system in accordance with the preferred embodiment;

FIG. 2 is a block diagram of an example distribution chain showing the derivation of rights from meta-rights;

FIG. 3 is a schematic illustration of a license in accordance with the preferred embodiment;

FIG. 4 is an example of a license expressed with an XML based rights language in accordance with the preferred embodiment;

FIG. 5 is a block diagram of the license server of the system of FIG. 1;

FIG. 6 is a block diagram of a rights label in accordance with the preferred embodiment;

FIG. 7 is a flow chart of the procedure for transferring and deriving rights in accordance with the preferred embodiment;

FIG. 8 illustrates an exemplary system including a state-of-rights server;

FIG. 9 illustrates employing of a state variable in deriving exclusive usage rights;

FIG. 10 illustrates employing of a state variable in deriving inherited usage rights;

FIG. 11 illustrates employing of a state variable in deriving rights that are shared among a known set of rights recipients;

FIG. 12 illustrates employing of a state variable in deriving rights that are shared among a dynamic set of rights recipients;

FIG. 13 illustrates employing of a state variable in maintaining a state shared by multiple rights;

FIG. 14 illustrates employing of multiple state variables to represent one state of rights;

FIG. 15 illustrates a case where not all rights are associated with states;

FIG. 16 illustrates a case where not all rights which are associated with states are shared or inherited; and

FIG. 17 illustrates a case of rights sharing based on an offer which does not explicitly include meta-rights.

DETAILED DESCRIPTION

A DRM system can be utilized to specify and enforce usage rights for specific content, services, or other items. FIG. 1 illustrates DRM System 10 that can be used in connection with the preferred embodiment. DRM System 10 includes a user activation component, in the form of activation server 20, that issues public and private key pairs to content users in a protected fashion, as is well known. During an activation process, some information is exchanged between activation server 20 and client environment 30, a computer or other device associated with a content recipient, and client component 60 is downloaded and installed in client environment 30. Client component 60 preferably is tamper resistant and contains the set of public and private keys issued by activation

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server 20 as well as other components, such as any component necessary for rendering content 42.

Rights label 40 is associated with content 42 and specifies usage rights and possibly corresponding conditions that can be selected by a content recipient. License Server 50 manages the encryption keys and issues licenses for protected content. These licenses embody the actual granting of usage rights to an end user. For example, rights label 40 may include usage rights permitting a recipient to view content for a fee of five dollars and view and print content for a fee of ten dollars. License 52 can be issued for the view right when the five dollar fee has been paid, for example. Client component 60 interprets and enforces the rights that have been specified in license 52.

FIG. 6 illustrates rights label 40 in accordance with the preferred embodiment. Rights label 40 includes plural rights offers 44 each including usage rights 44a, conditions 44b, and content specification 44c. Content specification 44c can include any mechanism for calling, referencing, locating, linking or otherwise specifying content 42 associated with offer 44. Clear (unprotected) content can be prepared with document preparation application 72 installed on computer 70 associated with a content publisher, a content distributor, a content service provider, or any other party. Preparation of content consists of specifying the rights and conditions under which content 42 can be used, associating rights label 40 with content 42 and protecting content 42 with some crypto algorithm. A rights language such as XrML can be used to specify the rights and conditions. However, the rights can be specified in any manner. Also, the rights can be in the form of a predefined specification or template that is merely associated with the content. Accordingly, the process of specifying rights refers to any process for associating rights with content. Rights label 40 associated with content 42 and the encryption key used to encrypt the content can be transmitted to license server 50. As discussed in detail below, rights 44a can include usage rights, which specify a manner of use, and meta-rights, which permit other rights to be derived.

In some case, license 52 includes conditions that must be satisfied in order to exercise a specified right. For, example a condition may be the payment of a fee, submission of personal data, or any other requirement desired before permitting exercise of a manner of use. Conditions can also be "access conditions" for example, access conditions can apply to a particular group of users, say students in a university, or members of a book club. In other words, the condition is that the user is a particular person or member of a particular group. Rights and conditions can exist as separate entities or can be combined.

Labels, offers, usage rights, and conditions can be stored together with content 42 or otherwise associated with content 42 through content specification 44c or any other mechanism. A rights language such as XrML can be used to specify the rights and conditions. However, the rights can be specified in any manner. Also, the rights can be in the form of a predefined specification or template that is merely associated with content 42.

A typical workflow for DRM system 10 is described below. A recipient operating within client environment 30 is activated for receiving content 42 by activation server 20. This results in a public-private key pair (and possibly some user/machine specific information) being downloaded to client environment 30 in the form of client software component 60 in a known manner. This activation process can be accomplished at any time prior to the issuing of a license.

When a recipient wishes to obtain specific content 42, the recipient makes a request for content 42. For example, a user,

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as a recipient, might browse a Web site running on Web server **80**, using a browser installed in client environment **30**, and request content **42**. During this process, the user may go through a series of steps possibly including a fee transaction (as in the sale of content) or other transactions (such as collection of information). When the appropriate conditions and other prerequisites, such as the collection of a fee and verification that the user has been activated, are satisfied, Web server **80** contacts license server **50** through a secure communications channel, such as a channel using a Secure Sockets Layer (SSL). License server **50** then generates license **52** for content **42** and Web server **80** causes both the content and license **52** to be downloaded. License **52** includes the appropriate rights, such as usage rights and/or meta-rights, and can be downloaded from license server **50** or an associated device. Content **42** can be downloaded from computer **70** associated with a vendor, distributor, or other party.

Client component **60** in client environment **30** will then proceed to interpret license **52** and allow use of content **42** based on the usage rights and conditions specified in license **52**. The interpretation and enforcement of usage rights are well known generally and described in the patents referenced above, for example. The steps described above may take place sequentially or approximately simultaneously or in various orders.

DRM system **10** addresses security aspects of content **42**. In particular, DRM system **10** may authenticate license **52** that has been issued by license server **50**. One way to accomplish such authentication is for application **60** to determine if license **52** can be trusted. In other words, application **60** has the capability to verify and validate the cryptographic signature, or other identifying characteristic of license **52**. Of course, the example above is merely one way to effect a DRM system. For example, license **52** and content **42** can be distributed from different entities. Clearinghouse **90** can be used to process payment transactions and verify payment prior to issuing a license.

As noted above, typical business models for distributing digital content include plural parties, such as owners, publishers, distributors, and users. Each of these parties can act as a supplier granting rights to a consumer downstream in the distribution channel. The preferred embodiment extends the known concepts of usage rights, such as the usage rights and related systems disclosed in U.S. Pat. Nos. 5,629,980, 5,634,012, 5,638,443, 5,715,403 and 5,630,235, to incorporate the concept of "meta-rights." Meta-rights are the rights that one has to generate, manipulate, modify, dispose of or otherwise derive other rights. Meta-rights can be thought of as usage rights to usage rights (or other meta-rights). This concept will become clear based on the description below.

Meta-rights can include derivable rights to offer rights, grant rights, negotiate rights, obtain rights, transfer rights, delegate rights, expose rights, archive rights, compile rights, track rights, surrender rights, exchange rights, and revoke rights to/from others. Meta-rights can include the rights to modify any of the conditions associated with other rights. For example, a meta-right may be the right to extend or reduce the scope of a particular right. A meta-right may also be the right to extend or reduce the validation period of a right. Meta-rights can be hierarchical and can be structured as objects within objects. For example, a distributor may have a meta-right permitting the distributor to grant a meta-right to a retailer which permits the retailer to grant users rights to view content. Just as rights can have conditions, meta-rights can also have conditions. Meta-rights can also be associated with other meta-rights.

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The concept of meta-rights can be particularly useful because distribution models may include entities that are not creators or owners of digital content, but are in the business of manipulating the rights associated with the content. For example, as noted above, in a multi-tier content distribution model, intermediate entities (e.g., distributors) typically will not create or use the content but will be given the right to issue rights for the content they distribute. In other words, the distributor or reseller will need to obtain rights (meta-rights) to issue rights. For the sake of clarity, the party granting usage rights or meta-rights is referred to as "supplier" and the party receiving and/or exercising such rights is referred to as "consumer" herein. It will become clear that any party can be a supplier or a consumer depending on their relationship with the adjacent party in the distribution chain. Note that a consumer "consumes", i.e. exercises, rights and does not necessarily consume, i.e. use, the associated content.

FIG. 2 schematically illustrates an example of a multi-tier distribution model **200**. Publisher **210** publishes content for distribution, by distributor **220** for example. Distributor **220** distributes content to retailers, such as retailer **230** and retailer **230** sells content to users, such as user **240**. In model **200**, publisher **210** could negotiate business relationships with distributor **220** and distributor **220** could negotiate business relationships with retailer **230**. Also, retailer **230** may desire usage rights that are beyond usage rights granted to distributor **220**. However, keep in mind that, in a distribution chain that utilizes a DRM system to control use and distribution of content or other items, content can travel from publisher **210** to user **240** through any digital communication channel, such as a network or transfer of physical media. When user **240** wishes to use content, a license is obtained, in the manner described above for example. Accordingly, the negotiated relationships can become difficult, if not impossible, to manage.

In model **200** of FIG. 2, retailer **230** will only grant rights to user **240** that have been predetermined and authorized by the distributor **220**, publisher **210** and potentially other parties upstream of the transaction, such as the content creator or owner. The rights are predetermined through, and derived from, meta-rights granted to retailer **230** by distributor **220**. Of course, there can be any number of parties in the distribution chain. For example, distributor **220** may sell directly to the public in which case retailer **230** is not necessary. Also, there may be additional parties. For example user **240** can distribute to other users.

In model **200** publisher grants to distributor **220** usage rights **212** permitting distribution of content, and meta-rights **214**. Meta-rights **214** permit distributor **220** to grant to retailer **230** the usage right **214'** (derived from meta-rights **214**) to distribute or possibly sell content and meta-rights **216** which permit retailer **230** to grant user **240** the right to use content. For example, publisher **210** may specify, through meta-rights **214**, that meta-right **216** granted to retailer **230** permits retailer **230** to grant only **500** licenses and usage rights **216'** that retailer **230** can grant to a user can only be "view" and "print-once". In other words, distributor **220** has granted meta-rights to retailer **230**. Similarly, publisher **210** issues meta-rights **214** to the distributor that will govern what type, and how many, rights distributor **220** can grant to retailer **230**. Note that these entities could be divisions, units or persons that are part of a larger enterprise, which also has other roles. For example, an enterprise might create, distribute, and sell content and carry out those activities using different personnel or different business units within the enterprise. The principles of meta-rights can be applied to an enterprise to determine content usage within that enterprise. Also, retailer **230**

could grant meta-rights **218** to user **240** permitting user **240** to share rights or grant usage rights to achieve a super-distribution model. It can be seen that meta-rights of a party are derived from meta-rights granted by an upstream party in the distribution chain.

For example, a person's medical records can be in digital form managed by a first hospital as publisher **230**. In this scenario, the person, as supplier, grants usage rights to the hospital, as consumer, to access and update the medical records. Should that person require treatment at a second hospital and desires to transfer their records to the second hospital, the person can grant to the first hospital the right to transfer the access rights to the new hospital through meta-rights. In other words, the person has specified meta-rights and granted the meta-rights to the first hospital. The meta-rights permit the first hospital to grant rights, as a supplier, to the second hospital, as a consumer. In another example, a person's last will and testament can be in digital form and managed by a law firm as publisher **210**. If the person wishes to allow a third party to review the will. The person can grant meta-rights to the law firm permitting the law firm to grant access rights to this third party.

At a high level the process of enforcing and exercising meta-rights are the same as for usage rights. However, the difference between usage rights and meta-rights are the result from exercising the rights. When exercising usage rights, actions to content result. For example usage rights can be for viewing, printing, or copying digital content. When meta-rights are exercised, new rights are created from the meta-rights or existing rights are disposed as the result of exercising the meta-rights. The recipient of the new rights may be the same principal (same person, entity, or machine, etc), who exercises the meta-rights. Alternatively, the recipient of meta-rights can be a new principal. The principals who receive the derived rights may be authenticated and authorized before receiving/storing the derived rights. Thus, the mechanism for exercising and enforcing a meta-right can be the same as that for a usage right. For example, the mechanism disclosed in U.S. Pat. No. 5,634,012 can be used.

Meta-rights can be expressed by use of a grammar or rights language including data structures, symbols, elements, or sets of rules. For example, the XrML™ rights language can be used. As illustrated in FIG. 3, the structure of license **52** can consist of one or more grants **300** and one or more digital signatures **310**. Each grant **300** includes specific granted meta-rights **302** such as rights to offer usage rights, grant usage rights, obtain usage rights, transfer usage rights, exchange usage rights, transport usage rights, surrender usage rights, revoke usage rights, reuse usage rights, or management meta-rights such as the rights to backup rights, restore rights, recover rights, reissue rights, or escrow the rights for management of meta-rights and the like.

Grant **300** can also specify one or more principals **304** to whom the specified meta-rights are granted. Also grants **300** can include conditions **306** and state variables **308**. Like usage rights, access and exercise of the granted meta-rights are controlled by any related conditions **306** and state variables **308**. The integrity of license **52** is ensured by the use of digital signature **310**, or another identification mechanism. Signature **310** can include a crypto-algorithm, a key, or another mechanism for providing access to content **42** in a known manner. The structure of digital signature **310** includes the signature itself, the method of how the code is computed, the key information needed to verify the code and issuer identification.

State variables track potentially dynamic states conditions. State variables are variables having values that represent sta-

tus of rights, or other dynamic conditions. State variables can be tracked, by clearinghouse **90** or another device, based on identification mechanisms in license **52**. Further, the value of state variables can be used in a condition. For example, a usage right can be the right to print content **42** for and a condition can be that the usage right can be exercised three times. Each time the usage right is exercised, the value of the state variable is incremented. In this example, when the value of the state variable is three, the condition is no longer satisfied and content **42** cannot be printed. Another example of a state variable is time. A condition of license **52** may require that content **42** is printed within thirty days. A state variable can be used to track the expiration of thirty days. Further, the state of a right can be tracked as a collection of state variables. The collection of the change is the state of a usage right represents the usage history of that right.

FIG. 4 is an example of license **52** encoded in XrML™. The provider grants the distributor a meta right to issue a usage right (i.e., play) to the content (i.e., a book) to any end user. With this meta right, the distributor may issue the right to play the book within the U.S. region and subject to some additional conditions that the distributor may impose upon the user, as long as the distributor pays \$1 to the provider each time the distributor issues a license for an end user. The XrML™ specification is published and thus well known.

FIG. 5 illustrates the primary modules of license server **50** in accordance with the preferred embodiment. License interpreter module **502** validates and interprets license **52** and also provides the functions to query any or all fields in the license such as meta-rights **302**, conditions **306**, state variables **308**, principle **304**, and/or digital signature **310**. License manager module **503** manages all license repositories for storing licenses **52**, and also provides functions to create licenses **52** for derived rights, verify licenses, store licenses, retrieve licenses and transfer licenses. State of rights module **504** manages the state and history of rights and meta-rights. The current value and history of the state variables together with the conditions controls the permission to exercise given meta-rights for a given authenticated principal. Condition validator **506** verifies conditions associated with the meta-rights. Together with the state variables, conditions associated with meta-rights define variables whose values may change over the lifetime of the meta-rights. Values of state variables used in conditions can affect the meta-rights at the time and during the time the rights are exercised.

Authorization module **508** authorizes the request to exercise meta-rights and to store the newly created rights or derived rights as the result of exercising the meta-rights. Authorization module **508** accesses both state of rights manager module **504** and condition validator module **506**. Authorization module **508** interacts with license manager module **503** and the list of state variables and conditions and then passes the state variables to state of rights manager module **504** and condition list to condition validator module **506** for authorization.

A request for exercising a meta-right is passed to meta-rights manager module **510**. Assuming that the requesting device has been authenticated, meta-rights manager module **510** requests the license manager module **504** to verify the license for exercising the requested meta-rights. License manager module **504** verifies the digital signature of the license and the key of the signer. If the key of the signer is trusted and the digital signature is verified then license manager module **504** returns "verified" to the meta-rights manager module **510**. Otherwise "not verified" is returned.

Authorization module **508** instructs license manager **503** to fetch state variable **308** and conditions **306** of license **52**.

Authorization manager 508 then determines which state variables are required to enforce license 52. State of rights manager 504 then supplies the current value of each required state variable to authorization module 508. Authorization module 508 then passes conditions 306 and the required state variables to condition validator 506. If all conditions 306 are satisfied, authorization module 508 returns “authorized” to meta-rights manager module 510.

Meta-rights manager module 510 verifies license 52 and meta-rights 302 therein, to authorize the request to exercise meta-rights 302, to derive new rights from meta-rights 302, and to update the state of rights and the current value of the conditions. Rights manager module 512, on the other hand, manages the new rights created or the derived rights as the result of exercising the meta-rights. Rights manager module 512 uses authorization module 508 to verify that recipient of the newly created rights or derived rights is intended principal 304. If the recipient are authorized then the rights manager module 512 directs license manager 504 to store the newly created rights in a repository associated with the consumer. This is discussed in greater detail below with reference to FIG. 7.

The authorization process is not limited to the sequence or steps described above. For example, a system could be programmed to allow authorization module 508 to request the state conditions from license manager 504 prior to verification of the digital signature. In such a case it would be possible to proceed subject to a verified license. Further, the various modules need not reside in the license server or related devices. The modules can be effected through hardware and/or software in any part of the system and can be combined or segregated in any manner.

Once a request to exercise a meta-rights has been authorized, the meta-right can be exercised. Meta-rights manager module 510 informs state of rights module 504 that it has started exercising the requested meta-rights. State of rights module 504 then records the usage history and changes its current value of the state variables. Meta-rights manager module 510 exercises the requested meta-rights in a manner similar to known procedures for usage rights. If new rights are derived, then meta-rights manager module 510 invokes license manager module 504 to create new rights as the result of exercising the target meta-rights. Each new right is then sent to the corresponding rights manager module 512 of the consumer and stored in a repository associated with the consumer. Rights manager module 512 of the consumer will authenticate and authorize the consumer before receiving and storing the newly created right. New rights can be derived from meta-rights in accordance with a set of rules or other logic. For example, one rule can dictate that a consumed right to offer a license for use will result in the consumer having the right to offer a usage right and grant a license to that usage right to another consumer.

FIG. 7 illustrates the workflow for transferring meta-rights and deriving new rights from the meta-rights in accordance with the preferred embodiment. All steps on the left side of FIG. 7 relate to the supplier of rights and all steps on the right side of FIG. 7 relate to the consumer of rights. In step 702, principal 304 of license 52 is authenticated in a known manner. In other words, it is determined if the party exercising meta-right 302 has the appropriate license to do so. If the principal is not authorized, the procedure terminates in step 704. If the principal is authorized, the procedure advances to step 706 in which meta right 302 is exercised and transmitted to the consumer in the form of license 52 having derived rights in the manner set forth above. In step 708 the principal of this new license is authenticated. In other words, it is

determined if the party exercising the derived rights has the appropriate license to do so. If the principal is not authorized, the procedure terminates in step 710. If the principal is authorized, the procedure advances to step 712 in which the derived right is stored. The procedure then returns to step 708 for each additional right in the license and terminates in step 714 when all rights have been processed.

Thus, the exemplary embodiments include a method for transferring rights adapted to be associated with items from a rights supplier to a rights consumer, including obtaining a set of rights associated with an item, the set of rights including meta-rights specifying derivable rights that can be derived therefrom by the rights consumer, determining whether the rights consumer is entitled to derive the derivable rights specified by the meta-rights, and at least one of deriving the derivable rights, and generating a license including the derived rights with the rights consumer designated as a principal if the rights consumer is entitled to derive the derivable rights specified by the meta-rights. The exemplary embodiments further include a license associated with an item and adapted to be used within a system for managing the transfer of rights to the item from a rights supplier to a rights consumer. The license includes a set of rights including meta-rights specifying derivable rights that can be derived therefrom by the rights consumer, a principal designating at least one rights consumer who is authorized to derive the derivable rights, and a mechanism for providing access to the item in accordance with the set of rights. The exemplary embodiments still further include a method for deriving rights adapted to be associated with items from meta-rights, including obtaining a set of rights associated with an item, the set of rights including meta-rights specifying derivable rights that can be derived therefrom by the rights consumer, and generating a license associated with the item and including the derived rights.

FIG. 8 illustrates an exemplary system including a common state-of-rights server, according to the present invention. In FIG. 8, the exemplary system can include a common state-of-rights server of the system 801, including a state-of-rights manager 809, and one or more state-of-rights repositories 814, and one or more license servers 800, including a meta-rights manager 810, a usage rights manager 812, an authorization component 808, a condition validator 806, a state-of-rights manager 804, one or more state-of-rights repositories 816, a license manager 803, a license interpreter 802, and one or more license repositories 818.

The common state-of-rights server 801 can be configured as a remote server connected with one or more of the license servers 800. The common state-of-rights server 801 provides comparable services as the state-of-rights manager 804 in the license servers 800 via the state-of-rights manager 809. The services provided by the state-of-rights server 801 are accessible and states that the server 801 manages can be shared by one or more rights suppliers and rights consumers (not shown).

The state-of-rights server 801 can be configured as a remote server connected with one or more of the license servers 800 via one or more communication links 820, and the like. The services provided by the state-of-rights server 801 also can be integrated within one or more of the license server 800 and such services can be accessible by other rights suppliers, rights consumers, and the like.

The license manager 803 derives new rights based on an offer, which can include any suitable machine-readable expression, and optionally including meta-rights. While deriving rights, the license manager 803 can create new state variables to be associated with derived rights. The creation of state variables and their scopes can be prescribed in the offer

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or by some other function in the system. The state variables can be created in one or more instances, for example, prior to rights derivation, during rights derivation, upon fulfillment of conditions, during a first exercise of rights associated with the state variables, and the like. The state variables can be designated exclusively for a specific rights consumer, can be shared among rights consumers, and can be shared among rights consumers and other entities, such as rights suppliers, and the like. The license manager **803** can interact with the state-of-rights manager **804** to associate new state variables with physical addresses in one or more of the state-of-rights repositories **816**. The state-of-rights manager **804** can access the one or more state-of-rights repositories **816** and can interact with the state-of-rights server **801** to access shared state variables from one or more of the state-of-rights repositories **814**.

Designated state variables can be used to support a license that grants a recipient of the license a right to print content 5 times, shared state variables can be used to support a site license that grants a group of authorized users a right to print content an aggregated total of 100 times, and the like. A designated state variable can be updated when the corresponding right is exercised, whereas a shared state variable can be updated when an authorized user exercises the corresponding right. In other words, a shared state variable can include a data variable that is updated in response to actions by a plurality of users and which is globally applied to each of the users.

There are multiple ways to specify the scope of state variables, each of which can affect whether the derivative state variables can be shared, how the derivative state variables can be shared, and the like. For example, a state variable can be local, and solely confined to a recipient or can be global, and shared by a predetermined group of recipients. A global state variable can be shared by a group of recipients not determined when derived rights are issued, but to be specified later, perhaps based on certain rules defined in the license or based on other means. A global state variable can be shared between one or more rights suppliers, predetermined recipients, unspecified recipients, and the like. Advantageously, depending on the sharing employed with a given a business model and the rights granted in the meta-rights, state variables can be created at different stages of the value chain.

A set of non-exhaustive exemplary usages of state variables will now be described. For example, a state variable can be unspecified in meta-rights, which means the identifier and value of the state variable are yet to be determined by the meta-rights manager module **810** and included in the derived right. If a distinct state variable is assigned to each derived right, the scope of the state variable in the derived right is typically exclusive to the recipient.

FIG. 9 is used to illustrate employing of a state variable in deriving exclusive usage rights, according to the present invention. In FIG. 9, rights **902** and **903** derived from an offer **901** are exclusive to each respective consumer. The offer **901** is a type of meta-right of which the recipients have the rights to obtain specific derivative rights when the conditions for obtaining such rights are satisfied. Accordingly, the exemplary offer **901** has an unspecified state variable **904**. However, specific state variable **905** and **906**, each with uniquely assigned identifications (IDs) are included in the derived rights **902** and **903**. The derived state variables **905** and **906** are bound to their associated derived rights, e.g., "AlicePlayEbook" (i.e., Alice has the right to play Ebook) is bound to derived right **902**, and "BobPlayEbook" (i.e., Bob has the right to play Ebook) is bound to derived right **903**. The "AlicePlayEbook" variable can be updated when Alice exercises

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her play right, whereas the "BobPlayEbook" variable can be updated when Bob exercises his play right.

Other than deriving rights from an offer, a right can transfer from an entity to a recipient. When a right is transferred, the governing of the associated state variable is also transferred to the recipient. After a right is transferred, the source principal typically can no longer exercise the right, whereas the recipient can exercise the right. The license server governing the exercising of a right of a recipient assumes the responsibility for state management. If, however, the state variables are managed by the common state of right server **801**, the state of right server **801** needs to be informed of the transfer of right. Specifically, the state variable can be managed in the context of the recipient after the transfer of right.

When a right is to be shared between the source principal and the recipient, the associated state variable is referenced in the derived right. If the same right is shared with multiple recipients, then typically all of the recipients share the same state variables with the source principal. In this case, a shared state can be managed by an entity that is accessible by all sharing principals.

FIG. 10 is used to illustrate employing of a state variable in deriving inherited usage rights, according to the present invention. In FIG. 10, a derived right can inherit a state variable from meta-rights. For example, a personal computer (PC) of a user, Alice, can be configured to play an e-book according to a license **1003**. A personal data assistant (PDA) of Alice also can obtain a right to play the e-book according to offer **1001**, if the PC and PDA share the same state variables **1004** and **1005**, e.g., "AlicePlayEbook." A derived right **1002** allows Alice also to play the e-book on her PDA as long as the PDA and the PC share a same count limit **1006** of 5 times.

When a usage right is to be shared among a predetermined set of recipients, a state variable for tracking a corresponding usage right can be specified in a meta-right using a same state variable identification for all recipients. During a process of exercising the meta-right, the same state variable identification is included in every derived right.

FIG. 11 illustrates the use of state variable in deriving rights that are shared among a known set of rights recipients, according to the present invention. In FIG. 11, a site license **1101** is issued to FooU university. For example, via the site license **1101**, a librarian is granted a right to issue rights that allow FooU students to play, view, and the like, corresponding content, such as e-books and the like, as long as such usage is tracked by a state variable **1104**, e.g., "www.fooU.edu." Accordingly, rights **1102** and **1103** derived from the site license **1101** include state variables **1105** and **1106**, "www.fooU.edu," which can be updated when corresponding students, Alice and Bob, play the e-book.

When a usage right is to be shared among a dynamic set of recipients, the state variable can stay unspecified in the usage right. When exercising a meta-right and a set of recipients is known, a state variable can be specified using some identification unique to the known recipients and can be included within a derived right.

FIG. 12 is used to illustrate employing of a state variable in deriving rights that are shared among a dynamic set of rights recipients, according to the present invention. In FIG. 12, an offer **1201** specifies that a distributor can issue site licenses to affiliated clubs, allowing 5 members of each club to concurrently view, play, and the like, content, such as an e-book. A corresponding state variable **1207** associated with such a right can be unspecified in the offer **1201**. When corresponding rights **1202** and **1203** are issued to affiliated clubs, the corresponding club identities are used to specify state variables **1208** and **1209** in the issued rights. The offers **1202** and **1203**

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are meta-rights derived from the offer 1201, with offer being assigned the distinct state variables 1208 and 1209. Further rights 1204-1206 can be derived from the offers 1202 and 1203 to be shared among members of each respective club. The licenses 1204 and 1205 are examples of rights derived from the offer 1202, and which inherit the state variable 1208, e.g., "urn:acme:club," whereas the license 1206 inherits the state variable 1209, e.g., "urn:foo:club."

Not only can state variables be shared among principals, such as rights suppliers, consumers, and the like, a state variable can be shared among multiple exercisable rights. FIG. 13 is used to illustrate employing of a state variable for maintaining a state shared by multiple rights, according to the present invention. In FIG. 13, a same state variable 1303 is associated to both a right to print 1302 and the right to play 1301, so that the total number of playing, printing, and the like, can be tracked together.

The state of rights can depend on more than one state variable. FIG. 14 is used to illustrate employing of multiple state variables to represent one state of rights, according to the present invention. The example described with respect to FIG. 14 builds upon the example described with respect to FIG. 12. In FIG. 14, a usage right can be tracked by employing multiple state variables 1407 and 1408 in an offer 1401. The state variable 1408, for example, representing a priority level, can stay unspecified in the corresponding offers 1402 and 1403 (e.g., site licenses). The corresponding state variables 1409-1411, for example, used for setting a priority, can be assigned to each member in the corresponding licenses 1404, 1405 and 1406. The corresponding right to view, play, and the like, can now be dependent on two state variables, effectively restricting 5 simultaneous views, plays, and the like, per priority level.

One state variable can represent a collection of states. For example, a unique identification can be used to represent a state variable, and an appropriate mechanism can be employed to map such unique id to a database of multiple variables, where each variable represents a distinct state.

The scope of state variables can be used to determine entities by which the state variables can be managed. For example, for a local state variable, usage tracking of associated rights thereof can be managed solely by a trusted agent embedded within a rights consumption environment, such as a media player, and the like. In addition, such usage tracking can be conducted by a trusted remote service, such as the common state-of-rights server 801. Further, shared global state variables can be made accessible by multiple trusted agents. To avoid privacy issues, security issues, trust issues, rights issues, and the like, associated with accessing content, such as data, and the like, included within a peer rights consumption environment, managing of such shared global state variables can be performed by a remote service, such as the state-of-rights server 801.

A counter is a common form of state variable usage. For example, such state sharing can include counter sharing where a state represents a number of times a right has been exercised, an event has occurred, and the like. Such counter sharing can be manifested in various forms and occur in many contexts, such as: tracking a number of simultaneous uses, tracking a number of sequential uses, sequencing (e.g., a commercial must be viewed before free content can be accessed), a one-time use constraint, a transaction count, a delegation control level, a super-distribution level, dependency on at least one or more services or devices, and the like.

In addition, state variables can be incarnated in a wide variety of forms. For example, a state variable can be used to track specific time slots within a period of time, such as used

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by a movie studio to transfer syndication rights to a specific TV station, to transfer syndication rights shared by a group of stations, to transfer syndication rights assigned through a bidding process, and the like.

State variables also can be employed, for example, with regional selling or distribution rights, in a statement from a financial clearing house to acknowledge that an appropriate fee has been paid, as a status of whether a commercial has been watched before free content can be accessed, and the like.

Not all rights need be associated with states. FIG. 15 is used to illustrate a case where not all rights are associated with states, according to the present invention. In FIG. 15, an offer 1501 allows a user, Alice, to grant an unlimited play right, view right, and the like, to her PDA. Such a play right need not be associated with any state. Accordingly, derived right 1502 also has an unlimited play right to the content, as well as the right 1503 for her PC.

Not all rights which are associated with states are shared or inherited. For example, some rights are meant for off-line usage, can be transferred in whole to another device, and hence are not shared with other devices. FIG. 16 is used to illustrate a case where not all rights which are associated with states are shared or inherited, according to the present invention. In FIG. 16, even though a play right 1603 of a user, Alice, a play right 1602 of a PDA of Alice, and a play right 1603 of a PC of Alice specify a same state variable identification 1604, a same state need not be shared since each device can track a state thereof locally. Advantageously, such an implementation would allow the PC and the PDA to each play the corresponding content up to 5 times.

FIG. 17 illustrates a form of an offer which does not explicitly include meta-rights. In FIG. 17, an offer 1701 is configured as a site license written in English. Licenses 1702 and 1703 are instances derived from the offer 1701. In an exemplary embodiment, variables 1704 and 1705 can be created based on interpretation of the offer 1701, for example, by the system of FIG. 8.

The preferred embodiments are not limited to situations where resellers, distributors or other "middlemen" are used. For example, the preferred embodiment can be applied within enterprises or other organizations, which create and/or distribute digital content or other items to control use of the content within the enterprise or other organization. Meta-rights can also be issued to end-users, when the grant of a right relates to another right. For example, the right to buy or sell securities as it is in the case of trading options and futures. Meta-rights can be assigned or associated with goods services, resources, or other items.

The invention can be implemented through any type of devices, such as computers and computer systems. The preferred embodiment is implemented in a client server environment. However, the invention can be implemented on a single computer or other device. Over a network using dumb terminals, thin clients, or the like, or through any configuration of devices. The various modules of the preferred embodiment have been segregated and described by function for clarity. However, the various functions can be accomplished in any manner through hardware and/or software. The various modules and components of the preferred embodiment have separate utility and can exist as distinct entities. Various communication channels can be used with the invention. For example, the Internet or other network can be used. Also, data can be transferred by moving media, such as a CD, DVD, memory stick or the like, between devices. Devices can include, personal computers, workstations, thin clients, PDA's and the like.

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The invention has been described through exemplary embodiments and examples. However, various modifications can be made without departing from the scope of the invention as defined by the appended claims and legal equivalents.

What is claimed is:

1. A computer-implemented method for transferring rights adapted to be associated with items from a rights supplier to a rights consumer, the method comprising:

obtaining a set of rights associated with an item, the set of rights including a meta-right specifying a right that can be created when the meta-right is exercised, wherein the meta-right is provided in digital form and is enforceable by a repository;

determining, by a repository, whether the rights consumer is entitled to the right specified by the meta-right; and exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right, wherein the created right includes at least one state variable based on the set of rights and used for determining a state of the created right.

2. The method of claim 1, wherein the state variable inherits a state thereof for content usage or rights transfer from the set of rights.

3. The method of claim 1, wherein the state variable shares a state thereof for content usage or rights transfer with the set of rights.

4. The method of claim 1, wherein the state variable inherits a remaining state for content usage or rights transfer from the set of rights.

5. The method of claim 1, wherein the state variable is updated upon exercise of a right associated with the state variable.

6. The method of claim 1, wherein exercising the meta-right creates a plurality of rights, wherein the state variable is shared by the created rights.

7. The method of claim 1, wherein the state variable represents a collection of states.

8. The method of claim 1, further comprising a plurality of state variables that determine the state of the created right.

9. The method of claim 1, wherein the at least one state variable is unspecified in the created right, is created during a rights transfer, and is assigned to the created right.

10. The method of claim 1, wherein the state variable is transferred from the right specified by the meta-right to the created right.

11. The method of claim 1, further comprising generating a license including the created right, if the rights consumer is entitled to the right specified by the meta-right.

12. A system for transferring rights adapted to be associated with items from a rights supplier to a rights consumer, the system comprising:

means for obtaining a set of rights associated with an item, the set of rights including a meta-right specifying a right that can be created when the meta-right is exercised, wherein the meta-right is provided in digital form and is enforceable by a repository;

means for determining whether the rights consumer is entitled to the right specified by the meta-right; and

means for exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right, wherein the created right includes at least one state variable based on the set of rights and used for determining a state of the created right.

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13. The system of claim 12, wherein the state variable inherits a state thereof for content usage or rights transfer from the set of rights.

14. The system of claim 12, wherein the state variable shares a state thereof for content usage or rights transfer with the set of rights.

15. The system of claim 12, wherein the state variable inherits a remaining state for content usage or rights transfer from the set of rights.

16. The system of claim 12, wherein the state variable is updated upon exercise of a right associated with the state variable.

17. The system of claim 12, wherein exercising the meta-right results creates a plurality of rights, wherein the state variable is shared by the created rights.

18. The system of claim 12, wherein the state variable represents a collection of states.

19. The system of claim 12, including a plurality of state variables that determine the state of the created right.

20. The system of claim 12, wherein the at least one state variable is unspecified in the created right, is created during a rights transfer, and is assigned to the created right.

21. The system of claim 12, wherein the state variable is transferred from the right specified by the meta-right to the created right.

22. The system of claim 12, further comprising means for generating a license including the created right, if the rights consumer is entitled to the right specified by the meta-right.

23. The system of claim 12, wherein the means for obtaining, the means for determining, and the means for exercising comprise at least one of computer-executable instructions, and devices of a computer system.

24. A device for transferring rights adapted to be associated with items from a rights supplier to a rights consumer, the device comprising:

means for obtaining a set of rights associated with an item, the set of rights including a meta-right specifying a right that can be created when the meta-right is exercised, wherein the meta-right is provided in digital form and is enforceable by a repository;

means for determining whether the rights consumer is entitled to the derivable right specified by the meta-right; and

means for exercising the meta-right to create the right specified by the meta-right if the rights consumer is entitled to the right specified by the meta-right, wherein the created right includes at least one state variable based on the set of rights and used for determining a state of the created right.

25. The device of claim 24, wherein the state variable inherits a state thereof for content usage or rights transfer from the set of rights.

26. The device of claim 24, wherein the state variable shares a state thereof for content usage or rights transfer with the set of rights.

27. The device of claim 24, wherein the state variable inherits a remaining state for content usage or rights transfer from the set of rights.

28. The device of claim 24, wherein the state variable is updated upon exercise of a right associated with the state variable.

29. The device of claim 24, wherein exercising the meta-right results creates a plurality of rights, wherein the state variable is shared by the created rights.

30. The device of claim 24, wherein the state variable represents a collection of states.

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31. The device of claim 24, including a plurality of state variables that determine the state of the created right.

32. The device of claim 24, wherein the at least one state variable is unspecified in the created right, is created during a rights transfer, and is assigned to the created right.

33. The device of claim 24, wherein the state variable is transferred from the right specified by the meta-right to the created right.

34. The device of claim 24, further comprising means for generating a license including the created right, if the rights consumer is entitled to the right specified by the meta-right.

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35. The device of claim 24, wherein the means for obtaining, the means for determining, and the means for exercising comprise at least one of computer-executable instructions, and devices of a computer system.

36. The device of claim 24, wherein one or more of the means for obtaining, the means for determining, and the means for exercising are specified in a license.

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