# APPENDIX D

| U.S. Pat. No. 7,181,459 | *Hailpern* in view of *Khare* or *Resnick* or *Dublin* |
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| 1. A computer implemented method of categorizing a network page, comprising: | *Hailpern* discloses applying META tags to an Internet Web page (i.e., "network page") using the PICS specification:<br><br>"An aspect of the current invention is a method to specify particular information, which for the described embodiments employs placing information in the META element specified in the HTTP protocol, which may be called META-tags. In an exemplary Internet implementation, the Platform for Internet Content Selection (PICS) provides a specification for sending META-information concerning electronic content. PICS is a World Wide Web Consortium (W3C) Protocol Recommendation, and is described, for example, in Rating Services and Rating Systems (and Their Machine Readable Descriptions), version 1.1, W3C Recommendation Oct. 31, 1996, and in PICS Label Distribution Label Syntax and Communication Protocols, version 1.1, W3C Recommendation Oct. 31, 1996 (see also http://www.w3.org/PICS)." *Hailpern* at col. 5, ll. 46-60.<br><br>*Khare* discloses using metadata such as Platform for Internet Content Selection ("PICS") to categorize the rights management of an Internet web page:<br><br>"The World Wide Web Consortium is dedicated to 'Realizing the Full Potential of the Web'. One of the core principles behind that commitment is 'automatability': enabling rich meta-data and context to be associated with Web content so computers and humans can effectively find, communicate, and use information. Intellectual Property Rights (IPR) are an example of "rich" information." *Khare* at § 1.<br><br>"Rights Declaration. We need deterministic statements of the rights being claimed, and distribution mechanisms for binding these declarations to the information objects. We believe that machine-readable meta-data formats & transport mechanisms, such as PICS, are an ideal way to capture rights declarations. [See attached <draft-reagle-PICS-copyright-00.txt>]". *Khare* at § 2.1.<br><br>The motivation to combine the references may be found in the common knowledge of those skilled in the art, the prior art as a whole, and/or the nature of the purported problem itself. *Hailpern* and *Khare* both disclose systems that categorize network pages using the PICS system. Therefore, the motivation to combine the references is inherent in the references. |

| [a] providing a list of categories, wherein said list of categories include a category for transacting business and a category for providing information, and wherein said list of categories include a category based on copyright status of material on a page; | *Hailpern* discloses that PICS labels can be used to classify/categorize the content of web pages:<br><br>"For PICS, META-information about electronic content is grouped according to the "rating service" or producer-and-intended-usage of the information, and within one such group, any number of categories or dimensions of information may be transmitted.  Each category has a range of permitted values, and for a specific piece of content, a particular category may have a single value or multiple values. In addition, the META-information group, known as a "PICS label", may contain expiration information." *Hailpern* at col. 5, l. 65 – col. 6, l. 2.<br><br>Creating categories for "transacting business," "providing information," and a category based on the copyright status of material on a page were known element prior to August 9, 2001.  Their combination with the *Hailpern* system is a combination of known elements that yields predictable results and is thus obvious. *See KSR Intern. Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1739 (2007) ("The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.").<br><br>Categories for "transacting business" and "providing information" were known elements prior to August 9, 2001 as evidenced by a number of online directories. *See, e.g.*, Yahoo!'s homepage from February 8, 1999 available at http://web.archive.org/web/19990208021547/http://www.yahoo.com/; *see also Baeza-Yates* at 10.4.2.1 ("There exist today many large online text collections to which category labels have been assigned. Traditional online bibliographic systems have for decades assigned subject headings to books and other documents. MEDLINE, a large collection of biomedical articles, has associated with it Medical Subject Headings (MeSH) consisting of approximately 18,000 categories . The Association for Computing Machinery (ACM) has developed a hierarchy of approximately 1200 category (keyword) labels. Yahoo!, one of the most popular search sites on the World Wide Web, organizes Web pages into a hierarchy consisting of thousands of category labels."); *see, e.g.*, *Baeza-Yates* at 10.4.2.1 discussing MeSH categories and HiBrowse interface.<br><br>*Khare* discloses that PICS labels can be used for copyright status:<br><br>"This document presents an alternative expression mechanism for the copyright status of Web resources.  Specifically it employs the Platform for Internet Content Selection (PICS)[2] label format to |

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| | associate web resources with their copyright and usage information. This in turn can be used by search engines, proxy servers, agents, clients, and users for content selection or to aid in rights compliance. This document employs the copy control system described in [1]." *Khare* at Using PICS for Copyright Notice and Control, Abstract.<br><br>Categories based on copyright status were also known elements in the field of categorization of online content prior to August 9, 2001. *See, e.g.*, Open Publication License v1.0, published June 8, 1999, available at http://www.opencontent.org/openpub/; The Assayer: Help, publicly available since at least February 2, 2001 at http://www.theassayer.org/help.html (Listing the following categories based on copyright status:<br>"0. Copyrighted, with a licensing agreement that prohibits selling or permanent use (an anti-book)<br>1. Copyrighted, with no licensing agreement (a traditional book) [also books on iUniverse]<br>2. Copyrighted, doesn't cost money to read, but otherwise not free<br>3. Public domain<br>4. Copylefted, but with restrictions on modification and/or sale<br>5. Copylefted: anyone can read, modify, and sell").<br><br>In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Resnick* disclose the limitation of this claim. The motivation to combine the references may be found in the common knowledge of those skilled in the art, the prior art as a whole, and/or the nature of the purported problem itself. *Hailpern* and *Resnick* both disclose systems that categorize network pages using the PICS system. Therefore, the motivation to combine the references is inherent in the references. *Resnick* discloses providing the claimed list of categories. *See* Appendix A at claim 1[a].<br><br>In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Dublin* disclose the limitation of this claim. The motivation to combine the references may be found in the common knowledge of those skilled in the art, the prior art as a whole, and/or the nature of the purported problem itself. *Hailpern* and *Dublin* both disclose systems that categorize network pages using META tags Therefore, the motivation to combine the references is inherent in the references. *Dublin* discloses providing the claimed list of categories. *See* Appendix B at claim 1[a]. |
| [b] assigning said network page to one or more of said list of | *Hailpern* discloses assigning a network page by including a META tag on an Internet Web page (i.e., "network page") using the PICS |

| categories; | specification: |
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| | "An aspect of the current invention is a method to specify particular information, which for the described embodiments employs placing information in the META element specified in the HTTP protocol, which may be called META-tags. In an exemplary Internet implementation, the Platform for Internet Content Selection (PICS) provides a specification for sending META-information concerning electronic content. PICS is a World Wide Web Consortium (W3C) Protocol Recommendation, and is described, for example, in Rating Services and Rating Systems (and Their Machine Readable Descriptions), version 1.1, W3C Recommendation Oct. 31, 1996, and in PICS Label Distribution Label Syntax and Communication Protocols, version 1.1, W3C Recommendation Oct. 31, 1996 (see also http://www.w3.org/PICS)." *Hailpern* at col. 5, ll. 46-60. |
| | *Khare* also discloses that PICS labels can be used to assign network pages to categories: |
| | "**Rights Notification.** Simple rights notification based upon a standard meta-data labeling format. PICS is already converging as the meta-data format for content rating. Many browsers can provide advisory notice that a site is labeled in some system (RSAC, SafeSurf~~, etc) and the corresponding ratings for that page." *Khare* at § 2.3. |
| | "Detached labels can easily associate copyright information with any web referenceable resource including audio and visual content." *Khare* at Using PICS for Copyright Notice and Control, § 2.3. |
| [c] providing a categorization label for the network page using the copyright status of material on the network page; and | *Hailpern* discloses displaying the information contained in the META tags in the network page: |
| | "The present invention also provides a method whereby the META-tagged links of a retrieved web page (if available) can be annotated to display their corresponding META-tags. This method involves the steps of: 1) using a client-side proxy to examine the META-tag of a Web page or objects and 2) displaying the associated META-tag information with each link (e.g., HTTP link) in the web page, if available." *Hailpern* at col. 16, ll. 15-21. |
| | *Khare* discloses providing labels (i.e., categorization labels) using the copyright status of material on the page: |
| | "Detached labels can easily associate copyright information |

| | with any web referenceable resource including audio and visual content." *Khare* at Using PICS for Copyright Notice and Control, § 2.3. |
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| | "This document presents an alternative expression mechanism for the copyright status of Web resources. Specifically it employs the Platform for Internet Content Selection (PICS)[2] label format to associate web resources with their copyright and usage information. This in turn can be used by search engines, proxy servers, agents, clients, and users for content selection or to aid in rights compliance. This document employs the copy control system described in [1]." *Khare* at Using PICS for Copyright Notice and Control, Abstract. |
| | "In [1], Daviel specified a system in which a Web document has "Print", "Save", and "Quote" variables associated with it, where ({0 = disallowed}, {1 = conditionally allowed}, {2 = unconditionally allowed}). These permissions are associated with a document by encoding them in an HTTP header, or HTML META tag. PICS is a more effective means of associating Web resources with their copyright status and control information as demonstrated in section 2.3." *Khare* at Using PICS for Copyright Notice and Control, § 2.1. |
| | In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Resnick* disclose the limitation of this claim. *Resnick* discloses providing the categorization label. *See* Appendix A at claim 1[c]. |
| | In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Dublin* disclose the limitation of this claim. *Dublin* discloses providing the categorization label. *See* Appendix B at claim 1[c]. |
| [d] controlling usage of the network page using the categorization label and the copyright status of the network page. | *Hailpern* discloses that web pages can be queried based on the PICS labels: |
| | "Those skilled in the art will appreciate that a client can determine whether a given web page, either a simple data resource or collection of objects, contains any relevant information for them by simply requesting the data using a "HEAD" request for header information, as specified in RFC 2068, for example. A participating server's response to such a request will include the AMT of the requested web page from which the client can determine whether or not the contents of the page are worth retrieving. For example, a client could make the HEAD request: HEAD /sports.index.html to determine whether the server's sports related index page currently contained anything interesting. Note that this web page might change dramatically often. The HTTP header of the server's response might contain the entry: |

PICS_label:(. . . (soccer 10 tennis 1 baseball 0) . . . ) indicating that the web page's contents (including both the contents of the page itself and the contents of linked pages) contained lots of information regarding soccer, and little information regarding baseball or tennis. Given this knowledge, the client could then better decide whether to retrieve the actual page.  Note that since the information was retrieved using a "HEAD" request, that only the HTTP header of the web page needed to be returned, thus saving network load, and client processing resources." *Hailpern* at col. 15, l. 50 – col. 16, l. 9.

*Hailpern* discloses "providing indicia" of the information contained in the META tags in the network page:

"The present invention also provides a method whereby the META-tagged links of a retrieved web page (if available) can be annotated to display their corresponding META-tags. This method involves the steps of: 1) using a client-side proxy to examine the META-tag of a Web page or objects and 2) displaying the associated META-tag information with each link (e.g., HTTP link) in the web page, if available." *Hailpern* at col. 16, ll. 15-21.

*Khare* discloses that PICS labels can be used to control usage of the Web page:

"[H]ere is one possible course of events for Web [Rights Management], based on the hypothesis that each layer will stabilize in succession:
**1. Rights Notification.** Simple rights notification based upon a standard meta-data labeling format. PICS is already converging as the meta-data format for content rating. Many browsers can provide advisory notice that a site is labeled in some system (RSAC, SafeSurf~~, etc) and the corresponding ratings for that page.
**2.Application-specific Rights Management.** The next step is a series of applications which protect rights within a single context. For example, an OS might only print or display fonts based on the embedded label -- as already occurs with embedded TrueType fonts. Browsers could be programmed to always consult a 'blacklist' of copyright-infringing resources run by a trusted third party. Rights labels could reflect ACLs and protections already enforced by underlying security mechanisms. Finally, we already have interest in high-value lock-box enveloped data with rights labels, such as Cryptolopes.
**3.General-purpose Rights Management.** In some sense, rights management can converge with trust management -- RM is the asking of "permission to take specified actions upon a given resource." Just as with PICS, users will start asking for customizable, portable

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| | enforcement policies. The policy language and policy-enforcement engines will become cross-application services.<br>**4.Automated Settlement Models.** Finally, automated policy engines can interface with an electronic payments infrastructure to actively seek out and settle rights. New social and business models will drive the development of micropayments, aggregation services, and other players which will make many kinds of rights easily and inexpensively clearable." *Khare* at § 2.3.<br><br>"In [1], Daviel specified a system in which a Web document has "Print", "Save", and "Quote" variables associated with it, where ({0 = disallowed}, {1 = conditionally allowed}, {2 = unconditionally allowed}). These permissions are associated with a document by encoding them in an HTTP header, or HTML META tag. PICS is a more effective means of associating Web resources with their copyright status and control information as demonstrated in section 2.3." *Khare* at Using PICS for Copyright Notice and Control, § 2.1.<br><br>"Multiple distribution methods (embedded within the document, transported by the server, or distributed from a label bureau) improve copy status and control management. Organizations can control the use and access to their IPR from their server or proxy. Organizations can also create "audit" spiders to understand the distribution and use of their content on the Internet." *Khare* at Using PICS for Copyright Notice and Control, § 2.3.<br><br>In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Resnick* disclose the limitation of this claim. *Resnick* discloses "providing indicia" of the categories. *See* Appendix A at claim 1[d].<br><br>In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Dublin* disclose the limitation of this claim. *Dublin* discloses "providing indicia" of the categories. *See* Appendix B at claim 1[d]. |
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| 6. The method of claim 1, wherein said plurality of categories based on the copyright status of material on a page comprise categories related to public domain, fair use only, use with attribution, and permission of copyright owner needed. | *Khare* discloses the copyright status of the web page is assigned to the web page. The copyright status includes the recited categories:<br><br>"In [1], Daviel specified a system in which a Web document has "Print", "Save", and "Quote" variables associated with it, where ({0 = disallowed}, {1 = conditionally allowed}, {2 = unconditionally allowed}). These permissions are associated with a document by encoding them in an HTTP header, or HTML META tag. PICS is a more effective means of associating Web resources with their copyright status and control information as demonstrated in section |

| | 2.3." *Khare* at Using PICS for Copyright Notice and Control, § 2.1. |
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| | It is inherent that the recited categories are included in the disclosed copyright categories because categories based on copyright status were known elements in the field of categorization of online content prior to August 9, 2001. *See, e.g.*, Open Publication License v1.0, published June 8, 1999, available at http://www.opencontent.org/openpub/; The Assayer: Help, publicly available since at least February 2, 2001 at http://www.theassayer.org/help.html (Listing the following categories based on copyright status: "0. Copyrighted, with a licensing agreement that prohibits selling or permanent use (an anti-book) 1. Copyrighted, with no licensing agreement (a traditional book) [also books on iUniverse] 2. Copyrighted, doesn't cost money to read, but otherwise not free 3. Public domain 4. Copylefted, but with restrictions on modification and/or sale 5. Copylefted: anyone can read, modify, and sell"). In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Resnick* disclose the limitation of this claim. *Resnick* discloses "providing indicia" of the categories. *See* Appendix A at claim 6. In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Dublin* disclose the limitation of this claim. *Dublin* discloses "providing indicia" of the categories. *See* Appendix B at claim 6. |
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| 9. The method of claim 1, wherein said categories include: a plurality of categories based on the copyright status of the material on a page. | *Khare* discloses that PICS labels can be used to create a plurality of categories based on the copyright status of material on a web page: "This document presents an alternative expression mechanism for the copyright status of Web resources. Specifically it employs the Platform for Internet Content Selection (PICS)[2] label format to associate web resources with their copyright and usage information. This in turn can be used by search engines, proxy servers, agents, clients, and users for content selection or to aid in rights compliance. This document employs the copy control system described in [1]." *Khare* at Using PICS for Copyright Notice and Control, Abstract. "In [1], Daviel specified a system in which a Web document has "Print", "Save", and "Quote" variables associated with it, where ({0 = disallowed}, {1 = conditionally allowed}, {2 = unconditionally allowed}). These permissions are associated with a document by |

| | encoding them in an HTTP header, or HTML META tag.  PICS is a more effective means of associating Web resources with their copyright status and control information as demonstrated in section 2.3." *Khare* at Using PICS for Copyright Notice and Control, § 2.1. |
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| 16. The method of claim 1, further comprising providing an indicium for each of said categories. | *Khare* discloses using a meta tag (i.e., an indicium) to create a label:<br><br>"He uses the copy control system in [1] to create the following label:<br><br>    (PICS-1.1 "http://www.wipo.org/v1.5"<br>     by "Mark Twain"<br>     labels on "1994.11.05T08:15-0500"<br>        for "http://www.twain.com/story.html"<br>        full "http://www.twain.com/IP-notice.html"<br>        ratings (print 1 save 1 quote 2))"<br><br>*Khare* at Using PICS for Copyright Notice and Control, § 2.2.<br><br>"This document presents an alternative expression mechanism for the copyright status of Web resources. Specifically it employs the Platform for Internet Content Selection (PICS) [2] label format to associate web resources with their copyright and usage information. This in turn can be used by search engines, proxy servers, agents, clients, and users for content selection or to aid in rights compliance." *Khare* at Using PICS for Copyright Notice and Control, Abstract.<br><br>"We argue that PICS is an effective method of communicating intellectual property information about Web content." *Khare* at Using PICS for Copyright Notice and Control, § 1. |
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| 17. The method of claim 16, wherein said indicium comprises an icon. | *Khare* discloses describing categories with icons:<br>"Many Rating Systems: systems provide multiple axes with rational points (some points can be described with text and icons)" *Khare* at Using PICS Labels for Trust Management.<br><br>*Hailpern* discloses indicating the information contained in the META tags on the network page:<br><br>"The present invention also provides a method whereby the META-tagged links of a retrieved web page (if available) can be annotated to display their corresponding META-tags. This method involves the steps of: 1) using a client-side proxy to examine the META-tag of a Web page or objects and 2) displaying the associated META-tag information with each link (e.g., HTTP link) in the web page, if available." *Hailpern* at col. 16, ll. 15-21. |

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| | An indicium comprised of an icon would have been obvious to one skilled in the art in because icons were commonly used to represent text in computer applications and web pages prior to August 9, 2001.<br><br>In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Resnick* disclose the limitation of this claim. *Resnick* discloses using an icon to indicate the category to the user:<br><br>"The second section describes each of the dimensions, or categories, and the scales used for each. In this case, there is just a single category, with five possible values: G through NC-17. In actual labels, these values would be represented by the integers 0--4; the service description allows a software program to determine that a value of 1 corresponds to the PG rating and even to display the PG.gif icon to a user." *Resnick* at p. 90, cols 1-2. |
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| 19. The method of claim 1, further comprising providing a categorization code that can be used to label the page with the categorization label that indicates the categories to which the page is assigned. | *Khare* discloses using a metadata vocabulary (i.e., a categorization code) to create a label. As an example, *Khare* discloses:<br><br>"He uses the copy control system in [1] to create the following label:<br><br>    (PICS-1.1 "http://www.wipo.org/v1.5"<br>     by "Mark Twain"<br>     labels on "1994.11.05T08:15-0500"<br>        for "http://www.twain.com/story.html"<br>        full "http://www.twain.com/IP-notice.html"<br>        ratings (print 1 save 1 quote 2))"<br><br>*Khare* at Using PICS for Copyright Notice and Control, § 2.2.<br><br>*Hailpern* discloses indicating the information contained in the META tags on the network page:<br><br>"The present invention also provides a method whereby the META-tagged links of a retrieved web page (if available) can be annotated to display their corresponding META-tags. This method involves the steps of: 1) using a client-side proxy to examine the META-tag of a Web page or objects and 2) displaying the associated META-tag information with each link (e.g., HTTP link) in the web page, if available." *Hailpern* at col. 16, ll. 15-21. |
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| 20. The method of claim 19, wherein said categorization code | *Khare* discloses using a META tag (i.e., an indicium) to create a label with multiple categories of copyright status: |

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| comprises an indicium for each of said categories. | "He uses the copy control system in [1] to create the following label:<br><br>    (PICS-1.1 "http://www.wipo.org/v1.5"<br>     by "Mark Twain"<br>     labels on "1994.11.05T08:15-0500"<br>        for "http://www.twain.com/story.html"<br>        full "http://www.twain.com/IP-notice.html"<br>        ratings (print 1 save 1 quote 2))"<br><br>*Khare* at Using PICS for Copyright Notice and Control, § 2.2.<br><br>*Hailpern* discloses indicating the information contained in the META tags on the network page:<br><br>"The present invention also provides a method whereby the META-tagged links of a retrieved web page (if available) can be annotated to display their corresponding META-tags. This method involves the steps of: 1) using a client-side proxy to examine the META-tag of a Web page or objects and 2) displaying the associated META-tag information with each link (e.g., HTTP link) in the web page, if available." *Hailpern* at col. 16, ll. 15-21. |
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| 21. The method of claim 20, wherein said indicium comprises two letters. | *Khare* does not limit the META tags to less than two letters. |
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| 22. The method of claim 20, wherein said categorization label includes the indicia for each category to which a page is assigned. | *Khare* discloses using a META tag (i.e., an indicium) to create labels for each category to which a page is assigned:<br><br>"He uses the copy control system in [1] to create the following label:<br><br>    (PICS-1.1 "http://www.wipo.org/v1.5"<br>     by "Mark Twain"<br>     labels on "1994.11.05T08:15-0500"<br>        for "http://www.twain.com/story.html"<br>        full "http://www.twain.com/IP-notice.html"<br>        ratings (print 1 save 1 quote 2))"<br><br>*Khare* at Using PICS for Copyright Notice and Control, § 2.2.<br><br>*Hailpern* discloses indicating the information contained in the META tags on the network page:<br><br>"The present invention also provides a method whereby the META-tagged links of a retrieved web page (if available) can be annotated to |

| | display their corresponding META-tags. This method involves the steps of: 1) using a client-side proxy to examine the META-tag of a Web page or objects and 2) displaying the associated META-tag information with each link (e.g., HTTP link) in the web page, if available." *Hailpern* at col. 16, ll. 15-21. |
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| 27. The method of claim 19, further comprising making said categorization label recognizable by a search engine. | *Khare* discloses that PICS labels can be used by search engines:<br><br>"This [the PICS categorization system] in turn can be used by search engines, proxy servers, agents, clients, and users for content selection or to aid in rights compliance." *Khare* at Using PICS for Copyright Notice and Control, Abstract.<br><br>"Finally, those skilled in the art will appreciate that a search engine may use the META-tags (AMTs) maintained in accordance with the current invention to increase the efficiency of searches it performs." *Hailpern* at col. 18, ll. 1-4. |
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| 28. The method of claim 1, further comprising making said categories to which a page is assigned recognizable by a search engine. | *Khare* discloses that PICS labels can be used by search engines:<br><br>"This [the PICS categorization system] in turn can be used by search engines, proxy servers, agents, clients, and users for content selection or to aid in rights compliance." *Khare* at Using PICS for Copyright Notice and Control, Abstract.<br><br>"Finally, those skilled in the art will appreciate that a search engine may use the META-tags (AMTs) maintained in accordance with the current invention to increase the efficiency of searches it performs." *Hailpern* at col. 18, ll. 1-4. |
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| 29. The method of claim 1, wherein said list of categories is provided on a graphical user interface. | *Khare* discloses that PICS labels can be used by search engines, which inherently have a graphical user interface:<br><br>"This [the PICS categorization system] in turn can be used by search engines, proxy servers, agents, clients, and users for content selection or to aid in rights compliance." *Khare* at Using PICS for Copyright Notice and Control, Abstract.<br><br>The categories described in *Hailpern* are displayed in a web browser, which is a graphical user interface. "Internet Browser or Web browser: A graphical interface tool that runs Internet protocols such as HTTP, and display results on the customers screen." *Hailpern*, col. 2, ll. 1-3. |
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| 30. A computer implemented method for categorizing a network page, comprising: | *Hailpern* discloses applying a META element/tag/label to an Internet Web page (i.e., "network page") using the PICS specification:<br><br>"An aspect of the current invention is a method to specify particular information, which for the described embodiments employs placing information in the META element specified in the HTTP protocol, which may be called META-tags.  In an exemplary Internet implementation, the Platform for Internet Content Selection (PICS) provides a specification for sending META-information concerning electronic content.  PICS is a World Wide Web Consortium (W3C) Protocol Recommendation, and is described, for example, in Rating Services and Rating Systems (and Their Machine Readable Descriptions), version 1.1, W3C Recommendation Oct. 31, 1996, and in PICS Label Distribution Label Syntax and Communication Protocols, version 1.1, W3C Recommendation Oct. 31, 1996 (see also http://www.w3.org/PICS)."  *Hailpern* at col. 5, ll. 46-60.<br><br>*Khare* discloses using metadata such as Platform for Internet Content Selection ("PICS") to categorize the rights management of an Internet web page:<br><br>"The World Wide Web Consortium is dedicated to 'Realizing the Full Potential of the Web'.  One of the core principles behind that commitment is 'automatability': enabling rich meta-data and context to be associated with Web content so computers and humans can effectively find, communicate, and use information. Intellectual Property Rights (IPR) are an example of "rich" information."  *Khare* at § 1.<br><br>"Rights Declaration. We need deterministic statements of the rights being claimed, and distribution mechanisms for binding these declarations to the information objects. We believe that machine-readable meta-data formats & transport mechanisms, such as PICS, are an ideal way to capture rights declarations. [See attached <draft-reagle-PICS-copyright-00.txt>]".  *Khare* at § 2.1. |
| [a] providing a list of categories, wherein said list of categories include a category for transacting business and a category for providing information, and wherein said list of categories include a plurality of categories based on the copyright status of material on a page; | *Hailpern* discloses that PICS labels can be used to classify/categorize the content of web pages:<br><br>"For PICS, META-information about electronic content is grouped according to the "rating service" or producer-and-intended-usage of the information, and within one such group, any number of categories or dimensions of information may be transmitted.  Each category has a range of permitted values, and for a specific piece of content, a particular category may have a single value or multiple values. In addition, the META-information group, known as a "PICS label", |

| | may contain expiration information." *Hailpern* at col. 5, l. 65 – col. 6, l. 2. |
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| | Using META tags to categorize a network page as one that "transacts business" or "provides information" was well-known in the art. *See, e.g.*, *HTML 4.0* at § 7.4.4; *HTML 4.0* at B.4. Furthermore, since *Hailpern* discloses that all web pages can be classified, and it was well known that web pages existed in the categories of "transacting business" and "providing information", it is inherent that *Hailpern* provides a list of categories that includes "transacting business" and "providing information". |
| | *Khare* discloses that PICS labels can be used to provide categories for network pages based on the copyright status of material on the page: |
| | "This document presents an alternative expression mechanism for the copyright status of Web resources. Specifically it employs the Platform for Internet Content Selection (PICS)[2] label format to associate web resources with their copyright and usage information. This in turn can be used by search engines, proxy servers, agents, clients, and users for content selection or to aid in rights compliance. This document employs the copy control system described in [1]." *Khare* at Using PICS for Copyright Notice and Control, Abstract. |
| | In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Resnick* disclose the limitation of this claim. *Resnick* discloses providing the claimed list of categories. *See* Appendix A at claim 30[a]. |
| | In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Dublin* disclose the limitation of this claim. *Dublin* discloses providing the claimed list of categories. *See* Appendix B at claim 30[a]. |
| [b] providing a categorization code for labeling the network page with a categorization label, wherein said categorization label indicates a set of categories and subcategories to which the network page is assigned, and wherein said categorization label indicates the copyright status of material on the network page; | *Khare* discloses using a system for categorizing web pages (i.e., a categorization code) used to provide the copyright status of the web page in a label: |
| | "Detached labels can easily associate copyright information with any web referenceable resource including audio and visual content." *Khare* at Using PICS for Copyright Notice and Control, § 2.3. |
| | "This document presents an alternative expression mechanism for the |

| and | copyright status of Web resources.  Specifically it employs the Platform for Internet Content Selection (PICS)[2] label format to associate web resources with their copyright and usage information. This in turn can be used by search engines, proxy servers, agents, clients, and users for content selection or to aid in rights compliance. This document employs the copy control system described in [1]." *Khare* at Using PICS for Copyright Notice and Control, Abstract.

"In [1], Daviel specified a system in which a Web document has "Print", "Save", and "Quote" variables associated with it, where ({0 = disallowed}, {1 = conditionally allowed}, {2 =  unconditionally allowed}).  These permissions are associated with a document by encoding them in an HTTP header, or HTML META tag.  PICS is a more effective means of associating Web resources with their copyright status and control information as demonstrated in section 2.3."  *Khare* at "*Using PICS for Copyright Notice and Control*", § 2.1.

In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Resnick* disclose the limitation of this claim.  *Resnick* discloses providing a categorization code.  *See* Appendix A at claim 30[b].

In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Dublin* disclose the limitation of this claim.  *Dublin* discloses providing a categorization code.  *See* Appendix B at claim 30[b]. |
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| [c] controlling usage of the network page using the categorization label and the copyright status of the network page. | *Hailpern* discloses "providing indicia" of the information contained in the META tags in the network page:

"The present invention also provides a method whereby the META-tagged links of a retrieved web page (if available) can be annotated to display their corresponding META-tags. This method involves the steps of: 1) using a client-side proxy to examine the META-tag of a Web page or objects and 2) displaying the associated META-tag information with each link (e.g., HTTP link) in the web page, if available." *Hailpern* at col. 16, ll. 15-21.

*Khare* discloses that PICS labels can be used to control usage of the Web page:

"[H]ere is one possible course of events for Web [Rights Management], based on the hypothesis that each layer will stabilize in succession:
**1. Rights Notification.** Simple rights notification based upon a standard meta-data labeling format. PICS is already converging as the |

meta-data format for content rating. Many browsers can provide advisory notice that a site is labeled in some system (RSAC, SafeSurf~~, etc) and the corresponding ratings for that page. **2.Application-specific Rights Management.** The next step is a series of applications which protect rights within a single context. For example, an OS might only print or display fonts based on the embedded label -- as already occurs with embedded TrueType fonts. Browsers could be programmed to always consult a 'blacklist' of copyright-infringing resources run by a trusted third party. Rights labels could reflect ACLs and protections already enforced by underlying security mechanisms. Finally, we already have interest in high-value lock-box enveloped data with rights labels, such as Cryptolopes.

**3.General-purpose Rights Management.** In some sense, rights management can converge with trust management -- RM is the asking of "permission to take specified actions upon a given resource." Just as with PICS, users will start asking for customizable, portable enforcement policies. The policy language and policy-enforcement engines will become cross-application services.

**4.Automated Settlement Models.** Finally, automated policy engines can interface with an electronic payments infrastructure to actively seek out and settle rights. New social and business models will drive the development of micropayments, aggregation services, and other players which will make many kinds of rights easily and inexpensively clearable." *Khare* at § 2.3.

"In [1], Daviel specified a system in which a Web document has "Print", "Save", and "Quote" variables associated with it, where ({0 = disallowed}, {1 = conditionally allowed}, {2 = unconditionally allowed}). These permissions are associated with a document by encoding them in an HTTP header, or HTML META tag. PICS is a more effective means of associating Web resources with their copyright status and control information as demonstrated in section 2.3." *Khare* at Using PICS for Copyright Notice and Control, § 2.1.

"Multiple distribution methods (embedded within the document, transported by the server, or distributed from a label bureau) improve copy status and control management. Organizations can control the use and access to their IPR from their server or proxy. Organizations can also create "audit" spiders to understand the distribution and use of their content on the Internet." *Khare* at Using PICS for Copyright Notice and Control, § 2.3.

In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Resnick* disclose the limitation of this claim. *Resnick* discloses

| | "providing indicia" of the categories. *See* Appendix A at claim 30[c].<br><br>In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Dublin* disclose the limitation of this claim. *Dublin* discloses "providing indicia" of the categories. *See* Appendix B at claim 30[c]. |
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| | |
| 31. A computer implemented method of categorizing a network page, comprising: | *Hailpern* discloses applying a META element/tag/label to an Internet Web page (i.e., "network page") using the PICS specification:<br><br>"An aspect of the current invention is a method to specify particular information, which for the described embodiments employs placing information in the META element specified in the HTTP protocol, which may be called META-tags. In an exemplary Internet implementation, the Platform for Internet Content Selection (PICS) provides a specification for sending META-information concerning electronic content. PICS is a World Wide Web Consortium (W3C) Protocol Recommendation, and is described, for example, in Rating Services and Rating Systems (and Their Machine Readable Descriptions), version 1.1, W3C Recommendation Oct. 31, 1996, and in PICS Label Distribution Label Syntax and Communication Protocols, version 1.1, W3C Recommendation Oct. 31, 1996 (see also http://www.w3.org/PICS)." *Hailpern* at col. 5, ll. 46-60.<br><br>*Khare* discloses using metadata such as Platform for Internet Content Selection ("PICS") to categorize the rights management of an Internet web page:<br><br>"The World Wide Web Consortium is dedicated to 'Realizing the Full Potential of the Web'. One of the core principles behind that commitment is 'automatability': enabling rich meta-data and context to be associated with Web content so computers and humans can effectively find, communicate, and use information. Intellectual Property Rights (IPR) are an example of "rich" information." *Khare* at § 1.<br><br>"Rights Declaration. We need deterministic statements of the rights being claimed, and distribution mechanisms for binding these declarations to the information objects. We believe that machine-readable meta-data formats & transport mechanisms, such as PICS, are an ideal way to capture rights declarations. [See attached <draft-reagle-PICS-copyright-00.txt>]". *Khare* at § 2.1. |
| [a] providing a list of categories, wherein said categories include a category based on the | *Hailpern* discloses that PICS labels can be used to classify/categorize the content of web pages: |

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| copyright status of material on a page, and wherein the copyright status comprises categories related to public domain, fair use only, use with attribution, and permission of copyright owner needed; | "For PICS, META-information about electronic content is grouped according to the "rating service" or producer-and-intended-usage of the information, and within one such group, any number of categories or dimensions of information may be transmitted.  Each category has a range of permitted values, and for a specific piece of content, a particular category may have a single value or multiple values. In addition, the META-information group, known as a "PICS label", may contain expiration information." *Hailpern* at col. 5, l. 65 – col. 6, l. 2.

*Khare* discloses that PICS labels can be used to categorize the copyright status of a web page:

"This document presents an alternative expression mechanism for the copyright status of Web resources.  Specifically it employs the Platform for Internet Content Selection (PICS)[2] label format to associate web resources with their copyright and usage information. This in turn can be used by search engines, proxy servers, agents, clients, and users for content selection or to aid in rights compliance. This document employs the copy control system described in [1]." *Khare* at Attachment: "*Using PICS for Copyright Notice and Control*", Abstract.

*Khare* discloses the copyright status of the web page is assigned to the web page.  The copyright status inherently includes the recited categories:

"In [1], Daviel specified a system in which a Web document has "Print", "Save", and "Quote" variables associated with it, where ({0 = disallowed}, {1 = conditionally allowed}, {2 = unconditionally allowed}).  These permissions are associated with a document by encoding them in an HTTP header, or HTML META tag.  PICS is a more effective means of associating Web resources with their copyright status and control information as demonstrated in section 2.3." *Khare* at Attachment: "*Using PICS for Copyright Notice and Control*", § 2.1.

In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Resnick* disclose the limitation of this claim.  *Resnick* discloses providing the claimed list of categories. *See* Appendix A at claim 31[a].

In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Dublin* disclose the limitation of this claim.  *Dublin* discloses |

| | providing the claimed list of categories. *See* Appendix B at claim 31[a]. |
|---|---|
| [b] assigning said network page to one or more of a plurality of said list of categories; | *Hailpern* discloses assigning an Internet Web page (i.e., "network page") using META tags and the PICS specification:<br><br>"An aspect of the current invention is a method to specify particular information, which for the described embodiments employs placing information in the META element specified in the HTTP protocol, which may be called META-tags. In an exemplary Internet implementation, the Platform for Internet Content Selection (PICS) provides a specification for sending META-information concerning electronic content. PICS is a World Wide Web Consortium (W3C) Protocol Recommendation, and is described, for example, in Rating Services and Rating Systems (and Their Machine Readable Descriptions), version 1.1, W3C Recommendation Oct. 31, 1996, and in PICS Label Distribution Label Syntax and Communication Protocols, version 1.1, W3C Recommendation Oct. 31, 1996 (see also http://www.w3.org/PICS)." *Hailpern* at col. 5, ll. 46-60.<br><br>*Khare* also discloses that PICS labels can be used to assign network pages to categories:<br><br>"**Rights Notification.** Simple rights notification based upon a standard meta-data labeling format. PICS is already converging as the meta-data format for content rating. Many browsers can provide advisory notice that a site is labeled in some system (RSAC, SafeSurf~~, etc) and the corresponding ratings for that page." *Khare* at § 2.3. |
| [c] providing a categorization label for the network page using the copyright status of material on the network page; and | *Hailpern* discloses displaying the information contained in the META tags in the network page:<br><br>"The present invention also provides a method whereby the META-tagged links of a retrieved web page (if available) can be annotated to display their corresponding META-tags. This method involves the steps of: 1) using a client-side proxy to examine the META-tag of a Web page or objects and 2) displaying the associated META-tag information with each link (e.g., HTTP link) in the web page, if available." *Hailpern* at col. 16, ll. 15-21.<br><br>*Khare* discloses using META tags (i.e., categorization labels) for copyright status:<br><br>"This document presents an alternative expression mechanism for the copyright status of Web resources. Specifically it employs the Platform for Internet Content Selection (PICS)[2] label format to |

| | associate web resources with their copyright and usage information. This in turn can be used by search engines, proxy servers, agents, clients, and users for content selection or to aid in rights compliance. This document employs the copy control system described in [1]." *Khare* at Using PICS for Copyright Notice and Control, Abstract.

"Detached labels can easily associate copyright information with any web referenceable resource including audio and visual content." *Khare* at Using PICS for Copyright Notice and Control, § 2.3.

"In [1], Daviel specified a system in which a Web document has "Print", "Save", and "Quote" variables associated with it, where ({0 = disallowed}, {1 = conditionally allowed}, {2 = unconditionally allowed}). These permissions are associated with a document by encoding them in an HTTP header, or HTML META tag. PICS is a more effective means of associating Web resources with their copyright status and control information as demonstrated in section 2.3." *Khare* at Using PICS for Copyright Notice and Control, § 2.1.

In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Resnick* disclose the limitation of this claim. *Resnick* discloses providing the categorization label. *See* Appendix A at claim 31[c].

In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Dublin* disclose the limitation of this claim. *Dublin* discloses providing the categorization label. *See* Appendix B at claim 31[c]. |
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| [d] controlling usage of the network page using the categorization label and the copyright status of the network page. | *Hailpern* discloses "providing indicia" of the information contained in the META tags in the network page:

"The present invention also provides a method whereby the META-tagged links of a retrieved web page (if available) can be annotated to display their corresponding META-tags. This method involves the steps of: 1) using a client-side proxy to examine the META-tag of a Web page or objects and 2) displaying the associated META-tag information with each link (e.g., HTTP link) in the web page, if available." *Hailpern* at col. 16, ll. 15-21.

*Khare* discloses that PICS labels can be used to control usage of the Web page:

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**1. Rights Notification.** Simple rights notification based upon a standard meta-data labeling format. PICS is already converging as the meta-data format for content rating. Many browsers can provide advisory notice that a site is labeled in some system (RSAC, SafeSurf~~, etc) and the corresponding ratings for that page.

**2. Application-specific Rights Management.** The next step is a series of applications which protect rights within a single context. For example, an OS might only print or display fonts based on the embedded label -- as already occurs with embedded TrueType fonts. Browsers could be programmed to always consult a 'blacklist' of copyright-infringing resources run by a trusted third party. Rights labels could reflect ACLs and protections already enforced by underlying security mechanisms. Finally, we already have interest in high-value lock-box enveloped data with rights labels, such as Cryptolopes.

**3. General-purpose Rights Management.** In some sense, rights management can converge with trust management -- RM is the asking of "permission to take specified actions upon a given resource." Just as with PICS, users will start asking for customizable, portable enforcement policies. The policy language and policy-enforcement engines will become cross-application services.

**4. Automated Settlement Models.** Finally, automated policy engines can interface with an electronic payments infrastructure to actively seek out and settle rights. New social and business models will drive the development of micropayments, aggregation services, and other players which will make many kinds of rights easily and inexpensively clearable." *Khare* at § 2.3.

"In [1], Daviel specified a system in which a Web document has "Print", "Save", and "Quote" variables associated with it, where ({0 = disallowed}, {1 = conditionally allowed}, {2 = unconditionally allowed}). These permissions are associated with a document by encoding them in an HTTP header, or HTML META tag. PICS is a more effective means of associating Web resources with their copyright status and control information as demonstrated in section 2.3." *Khare* at Using PICS for Copyright Notice and Control, § 2.1.

"Multiple distribution methods (embedded within the document, transported by the server, or distributed from a label bureau) improve copy status and control management. Organizations can control the use and access to their IPR from their server or proxy. Organizations can also create "audit" spiders to understand the distribution and use of their content on the Internet." *Khare* at Using PICS for Copyright Notice and Control, § 2.3.

In the alternative, if *Hailpern* and *Khare* are found not to satisfy this

| | claim limitation, *Hailpern* in combination with the teachings of *Resnick* disclose the limitation of this claim. *Resnick* discloses "providing indicia" of the categories. *See* Appendix A at claim 31[d].

In the alternative, if *Hailpern* and *Khare* are found not to satisfy this claim limitation, *Hailpern* in combination with the teachings of *Dublin* disclose the limitation of this claim. *Dublin* discloses "providing indicia" of the categories. *See* Appendix B at claim 31[d]. |
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