APPENDIX H

U.S. Pat. No. 7,181,459	Cole in view of Khare or Resnick or Dublin
1. A computer implemented method of categorizing a network page, comprising:	Cole discloses a categorizing system for network pages, implemented on a computer: "A computer system identifies web pages of interest to a client. The system comprises a cataloging function which defines a hierarchy of subject categories, logically arranges a multitude of web pages in the categories and periodically adds web pages to the categories." Cole at Abstract; Cole at col. 2, ll. 35-41.
	Khare discloses using metadata such as Platform for Internet Content Selection ("PICS") to categorize the rights management of an Internet web page:
	"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." <i>Khare</i> at § 1.
	"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>]". <i>Khare</i> at § 2.1.</draft-reagle-pics-copyright-00.txt>
	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. <i>Cole</i> and <i>Khare</i> both disclose a system for categorizing network pages. 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	Cole discloses providing a list of categories: "The system comprises a cataloging function which defines a hierarchy of subject categories, logically arranges a multitude of web pages in the categories and periodically adds web pages to the categories." Cole at col. 2, ll. 35-41.
category based on copyright status of material on a page;	"The cataloging form supports both hierarchical and key word searching, and lists the broad categories 42—recreation, arts, business, science, education obtained from the cataloging

function." *Cole* at col. 4, ll. 35-38.

Khare discloses that labels, such as the PICS label, can be used to indicate copyright status:

"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 the alternative, if *Cole* and *Khare* are found not to satisfy this claim limitation, *Cole* 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. *Cole* and *Resnick* both disclose a system for categorizing network pages. Therefore the motivation to combine the references is inherent in the references. *See* Appendix A, at claim 1[a].

In the alternative, if *Cole* and *Khare* are found not to satisfy this claim limitation, *Cole* 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. *Cole* and *Dublin* both disclose a system for categorizing network pages. Therefore the motivation to combine the references is inherent in the references. *See* Appendix B, at claim 1[a].

[b] assigning said network page to one or more of said list of categories; Cole discloses assigning network pages to one or more categories provided by the system: "The system comprises a cataloging function which defines a hierarchy of subject categories, logically arranges a multitude of web pages in the categories and periodically adds web pages to the categories." *Cole* at col. 2, ll. 36-40.

"In the illustrated embodiment, 30 the key word search also utilizes cataloging function 20, but alternately could use a different key-word search engine provided the engine assigns a category to each data web page and is periodically updated with new data web pages." *Cole* at col. 5, ll. 30-34; *Cole* at col. 9, ll. 5-9.

Khare also discloses that PICS labels can be used to assign network pages to categories:

"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.

"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 *Cole* discloses indicating the categorization label for the network page to the user:

"Typically, the client will proceed further down the hierarchy by a repetition of selections from the current web page (decision 239) in which case, the processing loops back to step 220. Each time the client is furnished with the corresponding cataloging form comprising hot links to a list of subcategories and hot links to data web pages. However, at any category in the hierarchy which includes a hot link to a data web page, the client can also select the hot link to the data web page (client step 241)." *Cole* at col. 5, ll. 13-21; *Cole* at col. 8, ll. 56-64; *Cole* at Fig. 5.

"These results [from step 332 of Fig. 7] include a list of titles of the data web pages which include the key word and the category of each of the data web pages referenced by the hot links. Then, profile building function adds the header and footer to the results and sends the html to client 12 (step 334)." *Cole* at col. 5, ll. 54-59; *Cole* at col. 9, ll. 21-27.

Khare also discloses indicating the categorization label for the network page to the user: "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.

Khare discloses that PICS labels can be used for copyright status:

"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 *Resnick* and *Khare are* found not to satisfy this claim limitation, *Resnick* 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 *Resnick* and *Khare are* found not to satisfy this claim limitation, *Resnick* 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

Cole discloses "providing indicia" of the categorization label for

page using the categorization label and the copyright status of the network page. the network page to the user:

"Typically, the client will proceed further down the hierarchy by a repetition of selections from the current web page (decision 239) in which case, the processing loops back to step 220. Each time the client is furnished with the corresponding cataloging form comprising hot links to a list of subcategories and hot links to data web pages. However, at any category in the hierarchy which includes a hot link to a data web page, the client can also select the hot link to the data web page (client step 241)." *Cole* at col. 5, ll. 13-21; *Cole* at col. 8, ll. 56-64; *Cole* at Fig. 5.

"These results [from step 332 of Fig. 7] include a list of titles of the data web pages which include the key word and the category of each of the data web pages referenced by the hot links. Then, profile building function adds the header and footer to the results and sends the html to client 12 (step 334)." *Cole* at col. 5, ll. 54-59; *Cole* at col. 9, ll. 21-27.

Khare discloses that categorization 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 *Resnick* and *Khare are* found not to satisfy this claim limitation, *Resnick* 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].

In the alternative, if *Resnick* and *Khare are* found not to satisfy this claim limitation, *Resnick* 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].

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 a plurality of categories based on the copyright status of the web page is assigned to the web page. The copyright status 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 $(\{0 = \text{disallowed}\}, \{1 = \text{conditionally allowed}\}, \{2 = \text{disallowed}\})$

said categories include: a plurality of categories based on the copyright status of the material on a page. "The the Plate associated information of the method of claim 1, further comprising providing an indicium copyright status of the material on a page." 16. The method of claim 1, further comprising providing an indicium	are discloses that PICS labels can be used to categorize the byright status of a web page: nis document presents an alternative expression mechanism for copyright status of Web resources. Specifically it employs the tform for Internet Content Selection (PICS)[2] label format to
comprising providing an indicium	ociate web resources with their copyright and usage ormation. This in turn can be used by search engines, proxy vers, agents, clients, and users for content selection or to aid in hts compliance. This document employs the copy control tem described in [1]." <i>Khare</i> at Using PICS for Copyright tice and Control, Abstract.
repering the conwell include the ll. 1	e uses the copy control system in [1] to create the following

17. The method of claim 16, wherein said indicium comprises an icon.	Khare discloses describing categories with icons: "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.
	In the alternative, if <i>Cole</i> and <i>Khare are</i> found not to satisfy this claim limitation, <i>Cole</i> in combination with the teachings of <i>Resnick</i> disclose the limitation of this claim. <i>Resnick</i> discloses using an icon to indicate the category to the user:
	"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." <i>Resnick</i> at p. 90, cols 1-2.
19. The method of claim 1, further comprising providing a categorization code that can be used	Cole discloses providing a hierarchy to create a label for each of the categories:
to label the page with the categorization label that indicates the categories to which the page is assigned.	"Typically, the client will proceed further down the hierarchy by a repetition of selections from the current web page (decision 239) in which case, the processing loops back to step 220. Each time the client is furnished with the corresponding cataloging form comprising hot links to a list of subcategories and hot links to data web pages. However, at any category in the hierarchy which includes a hot link to a data web page, the client can also select the hot link to the data web page (client step 241)." <i>Cole</i> at col. 5, ll. 13-21; <i>Cole</i> at col. 8, ll. 56-64; <i>Cole</i> at Fig. 5.
	Khare discloses using metadata (i.e., a categorization code) to create a label:
	"He uses the copy control system in [1] to create the following label:
	(PICS-1.1 "http://www.wipo.org/v1.5" by "Mark Twain"
	labels on "1994.11.05T08:15-0500"
	for "http://www.twain.com/story.html" full "http://www.twain.com/IP-notice.html"
	ratings (print 1 save 1 quote 2))"
	Khare at "Using PICS for Copyright Notice and Control", § 2.2.

20. The method of claim 19, wherein said categorization code comprises an indicium for each of said categories.	Cole discloses providing an indicium for each of the categories: "Typically, the client will proceed further down the hierarchy by a repetition of selections from the current web page (decision 239) in which case, the processing loops back to step 220. Each time the client is furnished with the corresponding cataloging form comprising hot links to a list of subcategories and hot links to data web pages. However, at any category in the hierarchy which includes a hot link to a data web page, the client can also select the hot link to the data web page (client step 241)." Cole at col. 5, Il. 13-21; Cole at col. 8, Il. 56-64; Cole at Fig. 5. Khare discloses using a META tag (i.e., an indicium) to create a label with multiple categories of copyright status: "He uses the copy control system in [1] to create the following label: (PICS-1.1 "http://www.wipo.org/v1.5" by "Mark Twain" labels on "1994.11.05T08:15-0500" for "http://www.twain.com/story.html" full "http://www.twain.com/story.html" ratings (print 1 save 1 quote 2))" Khare at "Using PICS for Copyright Notice and Control", § 2.2.
21. The method of claim 20, wherein said indicium comprises two letters.	Cole provides that the category hierarchy may be stored in a database and the first two letters of the code may be used to designate the category. Cole at col. 4, ll. 10-11. Khare does not limit the metadata to less than two letters.
22. The method of claim 20, wherein said categorization label includes the indicia for each category to which a page is assigned.	Cole discloses providing an indicium for each of the categories: "Typically, the client will proceed further down the hierarchy by a repetition of selections from the current web page (decision 239) in which case, the processing loops back to step 220. Each time the client is furnished with the corresponding cataloging form comprising hot links to a list of subcategories and hot links to data web pages. However, at any category in the hierarchy which includes a hot link to a data web page, the client can also select the hot link to the data web page (client step 241)." Cole at col. 5, ll. 13-21; Cole at col. 8, ll. 56-64; Cole at Fig. 5.

	Khare discloses using a META tag (i.e., an indicium) to create a label with multiple categories of copyright status:
	"He uses the copy control system in [1] to create the following label:
	(PICS-1.1 "http://www.wipo.org/v1.5" by "Mark Twain" labels on "1994.11.05T08:15-0500" for "http://www.twain.com/story.html" full "http://www.twain.com/IP-notice.html" ratings (print 1 save 1 quote 2))"
	Khare at "Using PICS for Copyright Notice and Control", § 2.2.
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: "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." <i>Khare</i> at " <i>Using PICS for Copyright Notice and Control</i> ", Abstract.
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: "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.
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: "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.

30. A computer implemented
method for categorizing a network
page, comprising:

Cole discloses a categorizing system for network pages, implemented on a computer: "A computer system identifies web pages of interest to a client. The system comprises a cataloging function which defines a hierarchy of subject categories, logically arranges a multitude of web pages in the categories and periodically adds web pages to the categories." Cole at Abstract; Cole at col. 2, ll. 35-41.

Khare discloses using metadata such as Platform for Internet Content Selection ("PICS") to categorize the rights management of an Internet web page:

"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.

"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;

Cole discloses providing a list of categories: "The system comprises a cataloging function which defines a hierarchy of subject categories, logically arranges a multitude of web pages in the categories and periodically adds web pages to the categories." *Cole* at col. 2, ll. 35-41.

"The cataloging form supports both hierarchical and key word searching, and lists the broad categories 42—recreation, arts, business, science, education . . . obtained from the cataloging function." *Cole* at col. 4 ll. 35-38.

Khare discloses that PICS labels can be used to categorize 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.

"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 the alternative, if *Cole* and *Khare are* found not to satisfy this claim limitation, *Cole* 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 *Cole* and *Khare are* found not to satisfy this claim limitation, *Cole* 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].

Cole discloses providing a categorization code for labeling a network page:

The flow chart of FIG. 11 illustrates automatic operations performed by profile building server 510. Once each day, for example, at 2:00 AM (decision 600), profile building server 510 sends a request to the catalog server 520 for data entries for all new URLs/web pages added that day to the catalog server's database 35 (and hierarchy). Each data entry includes a respective URL, descriptive information for the URL such as its title or first paragraph, and the category in which the new URL falls. Catalog server 520 returns the data entries to profile building server 510 which stores the data entries with a date stamp for each (step 602). Profile building server 510 stores the data entries grouped by category.

Cole also discloses a categorization label indicating the categories to which the page is assigned:

"Typically, the client will proceed further down the hierarchy by a repetition of selections from the current web page (decision 239) in which case, the processing loops back to step 220. Each time the client is furnished with the corresponding cataloging form comprising hot links to a list of subcategories and hot links to data

[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; and web pages. However, at any category in the hierarchy which includes a hot link to a data web page, the client can also select the hot link to the data web page (client step 241)." *Cole* at col. 5, ll. 13-21; *Cole* at col. 8, ll. 56-64; *Cole* at Fig. 5.

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 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* 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 *Cole* and *Khare are* found not to satisfy this claim limitation, *Cole* 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 *Cole* and *Khare are* found not to satisfy this claim limitation, *Cole* 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].

[c] controlling usage of the network page using the categorization label and the copyright status of the *Khare* discloses that PICS labels can be used to control usage of the Web page:

network 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." <i>Khare</i> at Using PICS for Copyright Notice and Control, § 2.3. In the alternative, if <i>Cole</i> and <i>Khare are</i> found not to satisfy this claim limitation, <i>Cole</i> in combination with the teachings of <i>Resnick</i> disclose the limitation of this claim. <i>Resnick</i> discloses "providing indicia" of the categories. <i>See</i> Appendix B, at claim 30[c]. In the alternative, if <i>Cole</i> and <i>Khare are</i> found not to satisfy this claim limitation, <i>Cole</i> in combination with the teachings of <i>Dublin</i> disclose the limitation of this claim. <i>Dublin</i> discloses "providing indicia" of the categories. <i>See</i> Appendix B, at claim 30[c].
31. A computer implemented method of categorizing a network page, comprising:	Cole discloses a categorizing system for network pages, implemented on a computer: "A computer system identifies web pages of interest to a client. The system comprises a cataloging function which defines a hierarchy of subject categories, logically arranges a multitude of web pages in the categories and periodically adds web pages to the categories." Cole at Abstract; Cole at col. 2, ll. 35-41. Khare discloses using metadata such as Platform for Internet Content Selection ("PICS") to categorize the rights management of an Internet web page: "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. "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
[a] providing a list of categories, wherein said categories include a category based on the copyright	attached <draft-reagle-pics-copyright-00.txt>]". <i>Khare</i> at § 2.1. <i>Cole</i> discloses providing a list of categories: "The system comprises a cataloging function which defines a hierarchy of subject categories, logically arranges a multitude of web pages in</draft-reagle-pics-copyright-00.txt>

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; the categories and periodically adds web pages to the categories." *Cole* at col. 2, ll. 35-41.

Khare discloses that PICS labels can be used to categorize network pages based on 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.

"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.

Khare discloses the copyright status of the web page is assigned to the web page. The copyright status 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 Using PICS for Copyright Notice and Control, § 2.1.

In the alternative, if *Cole* and *Khare are* found not to satisfy this claim limitation, *Cole* 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 *Cole* and *Khare are* found not to satisfy this claim limitation, *Cole* 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;

Cole discloses assigning network pages to one or more categories provided by the system: "The system comprises a cataloging function which defines a hierarchy of subject categories, logically arranges a multitude of web pages in the categories and periodically adds web pages to the categories." Cole at col. 2, ll. 36-40.

"In the illustrated embodiment, 30 the key word search also utilizes cataloging function 20, but alternately could use a different key-word search engine provided the engine assigns a category to each data web page and is periodically updated with new data web pages." *Cole* at col. 5, ll. 30-34; *Cole* at col. 9, ll. 5-9.

Khare discloses that PICS labels assign network pages to one or more categories:

"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 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.

[c] providing a categorization label for the network page using the copyright status of material on the network page; and

Cole discloses indicating the categorization label for the network page to the user:

"Typically, the client will proceed further down the hierarchy by a repetition of selections from the current web page (decision 239)

in which case, the processing loops back to step 220. Each time the client is furnished with the corresponding cataloging form comprising hot links to a list of subcategories and hot links to data web pages. However, at any category in the hierarchy which includes a hot link to a data web page, the client can also select the hot link to the data web page (client step 241)." *Cole* at col. 5, ll. 13-21; *Cole* at col. 8, ll. 56-64; *Cole* at Fig. 5.

"These results [from step 332 of Fig. 7] include a list of titles of the data web pages which include the key word and the category of each of the data web pages referenced by the hot links. Then, profile building function adds the header and footer to the results and sends the html to client 12 (step 334)." *Cole* at col. 5, ll. 54-59; *Cole* at col. 9, ll. 21-27.

Khare discloses using a metadata/PICS label (i.e., a label) to provide the copyright status of the web page:

"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 *Cole* and *Khare are* found not to satisfy this claim limitation, *Cole* 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 *Cole* and *Khare are* found not to satisfy this claim limitation, *Cole* 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].

[d] controlling usage of the network page using the categorization label and the copyright status of the network page. *Cole* discloses indicating the categorization label for the network page to the user:

"Typically, the client will proceed further down the hierarchy by a repetition of selections from the current web page (decision 239) in which case, the processing loops back to step 220. Each time the client is furnished with the corresponding cataloging form

comprising hot links to a list of subcategories and hot links to data web pages. However, at any category in the hierarchy which includes a hot link to a data web page, the client can also select the hot link to the data web page (client step 241)." *Cole* at col. 5, ll. 13-21; *Cole* at col. 8, ll. 56-64; *Cole* at Fig. 5.

"These results [from step 332 of Fig. 7] include a list of titles of the data web pages which include the key word and the category of each of the data web pages referenced by the hot links. Then, profile building function adds the header and footer to the results and sends the html to client 12 (step 334)." *Cole* at col. 5, ll. 54-59; *Cole* at col. 9, ll. 21-27.

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 *Cole* and *Khare are* found not to satisfy this claim limitation, *Cole* 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 *Cole* and *Khare are* found not to satisfy this claim limitation, *Cole* 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].