

TO: Robert Brauneis, Abraham L. Kaminstein Scholar in Residence, U.S. Copyright Office

FROM: Ariel Green, Sean Harb, Peter Holm, Kingdar Prussien, Kasonni Scales, and Juliana Yee, Copyright Policy Lab Practicum

cc: Maria Pallante, Register of Copyrights; Jacqueline Charlesworth, General Counsel, United States Copyright Office

cc: Paul Goldstein, Luciana Herman, and Lisa Valenti-Jordan

attachment: "Improving Copyright Information Management: An Investigation of Options and Areas for Further Research"

RE: Response to the Copyright Office's January 15, 2014, Notice of Inquiry Regarding "Strategic Plan for Recordation of Documents"

The Law and Policy Lab at Stanford Law School is composed of students committed to improving public policy in a variety of fields. As Stanford Law students enrolled in the Copyright Policy Lab Practicum, we have spent the last six months under the supervision of Professor Paul Goldstein and Lecturer Luciana Herman conducting policy research on the United States Copyright Office's recordation practices, and developing possible options for improving the recordation process. This research and analysis informs our response to the Copyright Office's Notice of Inquiry and the accompanying report. Our goal is to provide an informed perspective to the Copyright Office as it considers changes to its current recordation procedures.

1. A guided remitter responsibility model of electronic recordation

An electronic guided remitter responsibility model would reduce the three primary causes of delay in the document review process: hand coding, incomplete filings, and human error. First, by placing responsibility for ensuring the accuracy of catalog information on remitters, the Office could reduce the lengthy document review process by Document Specialists so that resources can be directed toward more strategic, systemic quality checks. Second, electronic forms could have specialized fields to assist remitters in calculating payments and ensuring that all the proper attachments are included with the submission. Where Document Specialists currently spend valuable time personally telephoning remitters to fix mistakes, an electronic system could reject documents with common omissions or errors and automatically flag mistakes for the remitter prior to final submission. Finally, requiring remitters to enter their own

information relieves Document Specialists from having to manually enter catalogue information, which can save them substantial time, particularly when documents have multiple titles.

Our research findings suggest that an electronic, guided remitter model of recordation could be successfully implemented. The Copyright Office appears to have enjoyed success with its electronic registration filing system, and it currently accepts short form assignments for recordation.¹ The Canadian Intellectual Property Office's ("CIPO") electronic filing system employs a limited review for signature and completeness by the Copyright Officer and appears to be quick and efficient.² The responsible officer in Canada did not report issues with delay or backlog,³ although, to be sure, she receives substantially fewer recordation requests than the U.S. Copyright Office. The United Kingdom's partially electronic filing system appears to streamline the process by standardizing the catalog information input process.⁴ Thus, the Copyright Office's experiences with registration and the experiences of foreign countries suggest that a guided remitter responsibility model of electronic recordation could be successful.

Moreover, implementing an electronic system is likely to reduce the Office's recordation costs over the long term, and thus could ultimately reduce the price of recordation to users. If labor intensity is the primary driver of recordation costs, as the prior Copyright Office report on costs suggests,⁵ then a reduction in the amount of effort required for recordation would also decrease cost. Accordingly, as demonstrated by CIPO's guided remitter model, the Patent and Trademark Office's electronic recordation model, and the Copyright Office's own experience with electronic registration filing, an electronic recordation option could ultimately lower the price of recordation for users. The United States Copyright Office charges electronic registrants about a third of the price of recording a single-title document,⁶ and the Canadian recordation fee is about half that of U.S. recordation.⁷ If submitted electronically, recording a patent assignment with the Patent and Trademark Office is free to users.⁸

2. The use of structured electronic documents that contain their own indexing information

We agree with Professor Robert Brauneis that implementing technology standards that enable fully automated electronic recording would save Document Specialists a great deal of

¹ Telephone Interview with Jacqueline Charlesworth, Zarifa Madyun, and Christopher Reed (Nov. 13, 2013).

² Telephone Interview with Jocelyn Bedard, Copyright Officer of Canadian Intellectual Property Office (Nov. 26, 2013).

³ *Id.*

⁴ UK COPYRIGHT SERVICE, *Transfer a Registration Guidance* (last visited Feb. 25, 2014), https://secure.copyrightservice.co.uk/account/transfer_reg.

⁵ U.S. COPYRIGHT OFFICE, *Analysis and Proposed Copyright Fee Adjustments to Go into Effect on or about August 1, 2009*, Submitted to Congress by Marybeth Peters, Register of Copyrights (March 15, 2009).

⁶ Electronic registration using eCO costs \$35. *Id.* (suggesting that the transition to the eCO registration system "realize[d] substantial savings").

⁷ The fee for processing a recorded document in Canada is \$65. CANADIAN INTELLECTUAL PROPERTY OFFICE, *Fees – Copyright* (last visited Feb. 25, 2014), <http://www.cipo.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/wr00091.html>.

⁸ USPTO.gov, *United States Patent and Trademark Office Fee Schedule* (last visited Feb. 25, 2014), <http://www.uspto.gov/web/offices/ac/qs/ope/fee010114.htm>.

time and reduce the overall cost of recordation.⁹ Adopting structured electronic documents would shift the burden of inputting data to remitters. Fully automated electronic recording is made possible when electronic document files consist of a tagged data section and a “view” section.¹⁰ The tagged data section is used for cataloguing, while the “view” section displays that data in a format that looks like a traditional assignment, license, will, or other document affecting ownership. Because the tagged data and information in the “view” section are synched, any changes in one section will be automatically reflected in the other.¹¹ This ensures that the cataloguing is not only efficient, but highly accurate.¹²

However, implementing a structured electronic documents model presents several challenges. First, the Copyright Office would have to develop and promulgate standards for remitted documents that will be accepted by the remitter community. Second, the Office would likely want to consider providing alternatives to a structured electronic document submission for remitters who lack the capacity or sophistication to conform to Office standards. Any standard the Office adopts may make recordation easier for repeat recordation players, but more challenging for one-time players. Finally, it is worth considering that while a fully automated electronic recording system may lower transaction costs, it would not necessarily reduce disincentives to input recordation information.

3. The linking of recordation records to registration records

Linking recordation records to registration records would improve the searchability of records. It would be much easier to ascertain chain of title if users were able to identify all the recorded documents associated with a particular work. Electronic forms could guide remitters to ensure that registration number entry is standardized, and drop down menus or pop-out browse windows could enable remitters to double-check that the inputted registration numbers match the titles contained in the document.

One potential cost of linking recordation to registration records stems from limitations in the current filing system. Currently, recordations and registrations are not usually identified by unique numbers and are more often identified by titles that are not required to be unique.¹³ If current recordation and registration records were linked, the Copyright Office may find it difficult to distinguish registrations bearing the same title. Further research into the additional costs and benefits of linking recordations and registrations may be warranted.

4. The use of standard identifiers, and other metadata standards, in recorded documents and the catalog of such documents

Metadata—or background information about a work stored in a digital file—can provide helpful information about a work. Metadata standards ensure that the underlying information

⁹ E-mail exchange with Robert Brauneis, Abraham L. Kaminstein Scholar in Residence, United States Copyright Office (Feb. 4, 2014) (on file with authors).

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.*

¹³ Notice of Inquiry: Strategic Plan for Recordation of Documents, 79 Fed. Reg. 2697 (Jan 15, 2014).

stored in metadata is consistent. Inclusion of metadata information, according to certain widely recognized standards, would be particularly helpful for image files, which cannot easily be translated into text or described in prose. Because files are often uploaded and downloaded on the internet, it would be a substantial benefit if a work's metadata followed it through these digital processes, keeping any copyright information intact. This does raise the potential for fraud, as metadata could be manipulated, resulting in false filings. Further, a one-size-fits-all solution is less ideal than is software that is tailored to the specific needs of particular industries.

5. Potential additional incentives to record documents pertaining to copyrights

On the incentive side, some scholars have looked at the possibility of reintroducing some level of formalities as a means of increasing the number of documents recorded. Jane Ginsburg recommends making recordation a condition for validity of transfer,¹⁴ and Daniel Gervais and others suggest limiting remedies when a rightsholder does not record a transfer.¹⁵ Such suggestions place the burden of providing information on the owner of the work, a situation the economics literature suggests is most efficient. These suggestions could increase the number of documents recorded but further empirical research is needed to measure their possible effects. Reintroducing formalities imposes its own costs, as rightsholders must shoulder a new burden. If complying with reintroduced formalities significantly increases the cost of transferring ownership, the reintroduction could prevent some transfers from taking place and it would interfere with private schemes for creating license and transfer mechanisms. Any reimposition of formalities should be undertaken at the same time as improvements to the Office's operations, with the goal of lowering the time and cost associated with recordation in order to minimize the additional burden on transferors.

Yet it is unclear whether these measures would appreciably reduce current deterrents to copyright recordation, and their consideration must weigh whether the value received will repay the investment in internal recordation enhancements. Additionally, any discussion of formalities must take into account the requirements of the Berne Convention, which prohibits formalities as a condition to protection. Additional research will be necessary to ensure that any given proposal complies with Berne's requirements.

¹⁴ Jane C. Ginsburg, 'With Untired Spirits and Formal Constancy': *Berne-Compatibility of Formal Declaratory Measures to Enhance Title-Searching* (September 16, 2013). Columbia Public Law Research Paper No. 13-346. Available at SSRN: <http://ssrn.com/abstract=2262924> or <http://dx.doi.org/10.2139/ssrn.2262924>.

¹⁵ Daniel J. Gervais and Dashiell Renaud, *The Future of United States Copyright Formalities: Why We Should Prioritize Recordation, and How to Do It* (May 6, 2013). BERKELEY TECH. L.J., Vol. 28, 2013; Vanderbilt Public Law Research Paper, Working Paper Series, 13-40. Available at SSRN: <http://ssrn.com/abstract=2318496>.

Stanford Law School

Copyright Policy Lab Practicum

Improving Copyright Information Management: An Investigation of Options and Areas for Further Research

Ariel Green, Sean Harb, Peter Holm, Kingdar Prussien,
Kasonni Scales, and Juliana Yee
J.D. Candidates, Stanford Law School

Professor Paul Goldstein
Lillick Professor of Law, Stanford Law School

Luciana Herman
Lecturer in Writing and Rhetoric, Stanford Law School

Lisa Valenti-Jordan
J.D. Candidate, Teaching Assistant, Stanford Law School

2014

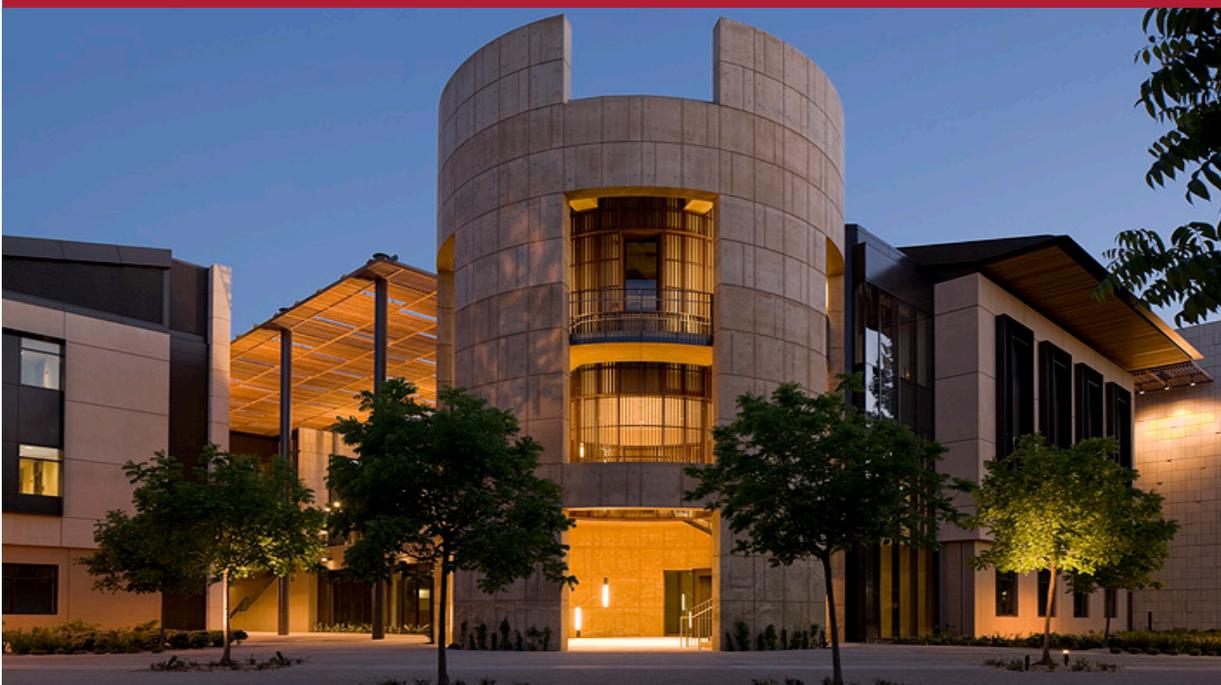


TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
I. INTRODUCTION	7
II. METHODOLOGY	8
III. FINDINGS: FORMAL GOVERNMENTAL RECORDATION	8
A. THE UNITED STATES COPYRIGHT OFFICE	8
<i>i. Recordation Practices</i>	9
<i>ii. Challenges Facing Formal Recordation</i>	14
<i>iii. The Orphan Works Problem as a Symptom</i>	15
B. LITERATURE REVIEW	19
C. COMPARISONS DOMESTIC AND ABROAD	20
<i>i. Real Property Recording</i>	20
<i>ii. The Patent and Trademark Office</i>	22
<i>iii. Foreign Copyright Offices</i>	23
IV. FINDINGS: PRIVATE RECORDATION	25
A. COLLECTING SOCIETIES	25
B. CREATIVE COMMONS	27
<i>i. Facilitating Transactions through Free Legal Tools</i>	27
<i>ii. Fostering Communities of Creators</i>	28
C. LITERATURE REVIEW: PRIVATE ACTORS	29
D. LITERATURE REVIEW: EXTENDED COLLECTIVE LICENSES	30
V. FINDINGS: EMERGING INFORMATION MANAGEMENT TOOLS	31
A. METADATA AND RECOGNITION TECHNOLOGY	31
<i>i. Copyright Office Initiatives</i>	31
<i>ii. Private Image Recognition Technology</i>	31
<i>iii. Literature Review: Metadata and Recognition</i>	32
B. LEGAL MECHANISMS AND INCENTIVES	33
<i>i. Statutory Incentives</i>	33
<i>ii. Restricting Remedies</i>	34
VI. OPTIONS AND TRADEOFFS	35
A. ELECTRONIC RECORDING BENEFITS AND MODELS	35
<i>i. The Patent and Trademark Assignment System</i>	35
<i>ii. A Modified Guided Remitter Model of Recordation</i>	35
<i>iii. Building a New System</i>	36
B. COPYRIGHT RECORD SEARCHING MODELS	36
<i>i. Westlaw-Like Searchability</i>	36
<i>ii. Collecting Societies</i>	36
<i>iii. PTO</i>	37
C. DATA: ASSIGNING IDENTIFIERS AND NORMALIZATION	37
<i>i. Authors</i>	37
<i>ii. Works</i>	37
D. LEGAL TOOLS: STANDARD TRANSFER DOCUMENTS	38
E. COPYRIGHT OWNERSHIP SEARCHING	39
<i>i. Copyright Hub</i>	39
<i>ii. Real Property System</i>	40

VII. FURTHER RESEARCH	40
A. A PROACTIVE ADVISORY BOARD	40
B. OUTSIDE CONTRACTING OF RECORDATION FUNCTIONS	41
C. THE IMPACT OF A DIGITAL RECORDATION SYSTEM ON ACTUAL RECORDATIONS	42
D. ADOPTION OF METADATA STANDARDS FOR IMAGES	43
E. CONDITIONING VALIDITY OR AVAILABILITY OF RELIEF ON RECORDATION	43
F. AN INTENT TO USE DATABASE.....	43
VIII. A NOTE ON BERNE	44
IX. CONCLUSION	44

EXECUTIVE SUMMARY

In recent years, the Copyright Office has explored various means for improving the management of and access to copyright ownership information. As digital solutions proliferate across the public and private sectors, an array of government and private actors have developed tools and practices that can enhance current copyright information management methods, including registration and recordation functions. This report investigates the challenges of tracking, recording, and accessing copyrights in the digital era, and explores the opportunities that various options might offer for enhancing user access to copyright information.

Copyright law encourages the production of creative works by granting authors a bundle of exclusive rights from which they may profit. But these rights are only as valuable as their owner's ability to transfer them through license or sale. If potential buyers or licensees cannot obtain the information they need to make well-informed transactions, the market for works weakens. The flow of copyright ownership information is thus critical to achieving a central goal of copyright.

The ownership information available today for many works is often fragmented or completely unavailable. Although the Copyright Act enables copyright owners to register their works and to record transfers of ownership, there are limited incentives for individuals to do so. As a result, innumerable "orphan works" offer no ownership information at all, while even registered works and recorded transfers often carry incomplete or out-of-date ownership information. And, even if a work has been registered, the rights to such works in the great majority of cases are transferred during their copyright term without being recorded. These omissions deprive potential licensees or purchasers of the most up-to-date ownership information. Digital media have further complicated ownership issues, challenging the Copyright Office's efforts to track, collect, and organize ownership information, and disseminate such information to the general public, for every day millions of copyrightable works are created in the form of videos, blog posts, photographs, and musical works.

Yet digital technologies also offer tools and opportunities to meet current challenges. The Copyright Office has enabled online registration, making that process cheaper and more accessible. But, at least in the view of some stakeholders, the cost of registration remains too high to justify for certain works, stock photographs in particular. Moreover, recordation methods are confined to a mail-in paper application, limiting searchability and ease of filing. Though electronically searchable, the Office's public records offerings are incomplete and access to them is unwieldy, due to the Office's non-normalized data entry and inconsistent electronic search tools.

Private entities offer partial solutions outside the Copyright Office, relying on digital technologies to lower overall costs and enhance efficiency. Such organizations as ASCAP and BMI efficiently index copyright information for music. The Copyright Clearance Center does the same for written works. And, although the technology is still nascent, a burgeoning number of photo registries, including PicScout and the PLUS Registry, are developing indices for visual works. Among other possibilities, this white paper explores the costs and benefits of the Copyright Office aligning its procedures with those of such organizations, as opposed to managing the problem internally.

"Build it and they will come" is rarely a useful prescription for public policy in the design of new information systems. Even testimony and other communications from stakeholders about the kinds of reforms they desire, or will at least accept, offer no assurance that, if implemented, the reforms will thrive amidst the realities of the marketplace.

Although empirical caution—what mechanisms will individuals and companies in fact adopt, and in what quantities?—tempers the analysis in this paper, some broad markers are available to guide policy decisions. One such marker is cost. If, other things being equal, a reform can reduce the net cost of providing a particular information service such as recordation, that reform can be considered desirable even though it fails to increase the number of documents recorded. Another marker requires calibration of comparisons. For example, even though it would probably be impossible to replicate in copyright markets the low cost or high value (virtually 100% completeness) achieved by the real property title practices, it is possible to derive lessons and potential solutions from real estate title companies' practices.

Yet another marker is the object of reform. Is the aim of reform to make information input easier, or access to information less costly and more available? Or, if it is both, which object predominates in a particular setting, and what are the connections between the two? This white paper balances the tradeoffs associated with an array of data entry technologies and practices with overall enhancements to the accessibility of information.

Through interviews with representatives from the Copyright Office, stakeholders, and other organizations, in addition to careful review of practices across the public and private sectors, the Office's internal registry procedures, and academic literature, this white paper evaluates options to enhance the flow of copyright information. The paper investigates governmental information management systems, drawing on lessons from the PTO, foreign copyright offices, real property recording, and private systems, examining collective rights organizations and Creative Commons. It also draws upon analysis of legal mechanisms, such as extended collective licenses, presumptions, and statutory damages.

While legal scholars have considered many facets of the copyright information management system, including incentives for owners to provide information to the Office and the consequences of placing upon owners or users the burden of bearing the transaction costs of searches, there has been no overall assessment of public access to such information and the Copyright Office's role in managing it. This white paper seeks to identify alternative systems for comparison, and offers options to the Copyright Office based on that assessment.

OPTIONS AND TRADEOFFS

Although our qualitative analysis points to the effectiveness of certain options in enhancing the flow of ownership information, we do not prioritize those options relative to each other. We encourage the Copyright Office to examine these potential options further according to their relative costs and associated tradeoffs in the context of the needs of the Office and copyright users.

- **Electronic Recording Benefits and Models**
 - **Modified guided remitter model of recordation.** The success of eCO registration, as well as electronic recordation and assignment procedures at the Patent and Trademark Office ("PTO") and the Canadian Intellectual Property Office ("CIPO"), suggest that an

electronic recordation system would be faster and more cost-effective, lowering user fees and mitigating delay. The modified guided remitter model of recordation is quick and efficient, with only one Copyright Officer needed to process the incoming requests. This model would not represent a dramatic departure from the Office's current recordation system, since it still involves an individualized review by an Office employee of each document recorded. Yet, building a new IT system entails more cost in terms of dollars and human resources, especially where staff will be required to engage in targeted quality checks of the system, and make systemic changes to eliminate common errors. Similarly, the Office would need to give special attention to building a system that could handle a high volume of user requests, which could increase over time with the enhanced ease of recordation.

▪ **Copyright Record Searching Models**

- **Westlaw-Like Searchability.** To enhance searchability, records could include multiple fields, constrainable by terms or dates. Users would be able to toggle easily from record to record, save search history, and flag records they wish to review later. And for visual works such as photographs the system should be able to take a graphical file as an input and determine whether it matches a previously registered work.
- **Private collecting societies and the real property system.** Search functionality could be modeled on the tools employed by private collecting societies, such as ASCAP and BMI or real property recorders, which allow users to search by a work's title, author, publisher, performers, and IPI. Up front capital investments include building the platforms, collecting and organizing the information presented on said platforms, and maintaining up-to-date records.
- **Patent and Trademark Office.** The PTO model offers a robust and comprehensive set of search tools and queries which depend on the normalization of data entry on the front-end. Furthermore, this normalization and standardization is bolstered by the fact that each patent for which an assignment is made has a unique patent number, which is akin to the use of other unique identifiers proposed in this paper for identifying works and authors.

▪ **Assigning Identifiers and Normalization.**

- **Uniform Coding System for Authors and Works.** Collecting societies have adopted the uniform number coding of the International Standard Name Identifier (ISNI) to link works with their rights owners, and rights owners to their collecting society affiliation. Joining this system of coding would allow the Office to link with other systems—such as those of ASCAP, BMI, and SESAC—to enhance the role of the Office in the copyright marketplace.

▪ **Copyright Ownership Searching.**

- **Copyright Hub.** By adapting ideas from Britain's Copyright Hub website, the Copyright Office could promote information sharing among similar organizations without having to connect actual records, which may pose cost and security concerns. Further, incorporating some ideas from the Copyright Hub into the Office's current web offerings could help the Copyright Office make clear to users where gaps in its records lie, and where users can go to obtain more information.
- **Real Property System.** Private title companies and county recorder's offices work closely together to ensure completeness of records. Subject to political considerations, the

Copyright Office may consider engaging with collecting societies and other big market players more closely to achieve some of the same results found in the real property system, including linking systems on a limited basis to automate the exchange copyright assignment and transfer records.

As the Copyright Office develops these options, it may also consider a range of other complementary possibilities, including forming an expert advisory board, contracting some recordation functions to outside entities, examining the impact of the digital recordation system on actual recordations, adopting metadata standards for photos, conditioning the validity of transfers or availability of statutory damages and injunctive relief on recordation, and creating an intent to use database. These possibilities are extrapolated from scholarly research, but require fuller empirical examination, with additional attention to costs and benefits.

The options presented here support the Copyright Office in its efforts to integrate new technologies and adapt to users' evolving standards and expectations with respect to searchability, submissions, and access to publicly held records and databases. These options contribute to an ongoing dialogue as the Office continues to enhance the flow of ownership information.

I. INTRODUCTION

The Copyright Office has many responsibilities, including advising Congress on policy, participating in international delegations and proceedings, providing litigation assistance, and educating the public on copyright—all consistently engaged with copyright ownership issues in the digital age. Over the past decade, ongoing conversations with authors, copyright owners, industry players, and academics, and the Office’s own internal self-assessments prompted the Office to initiate further investigation and propose reform in such areas as orphan works, registration, recordation, and public access to records.

- At least as early as 2004, the Office had identified the new opportunities that technology offered to improve public access to records, and defined its second of four strategic goals to accomplish over the next four years as follows: to “promote lawful use of copyrighted works and compensation to creators by providing timely, easy-to-use public services (including registration, recordation, and statutory licenses).”¹
- In 2006, the Office published a major study on orphan works, finding that the inability to locate rightsholders excludes millions of works from use, and offering an array of possible remedies to the problem.²
- In 2007, the Office accomplished a major reengineering effort which included implementation of eCO, an online copyright registration tool.³ The Office contemplated incorporating recordation in this electronic transition, but ultimately had to pause the project for budgetary reasons.⁴
- In 2008, the Office initiated the Copyright Records Digitization Project to scan the Office’s entire catalog of physical records. While many of the records after 1978 were already online and searchable, records prior to 1978 existed only on microfilm or paper cards. The Register of Copyrights reported in 2011 that the Office had completed scanning over 12.5 million cards and over 300 volumes of the 660-volume *Catalog of Copyright Entries*.⁵
- Since 2011, the Office’s priorities have included: review of group registration options; registration options for websites and other forms of digital authorship, electronic administration of statutory licenses, and recording notices of termination of copyright transfers.⁶ The Office also identified ten “Special Projects,” including the “Business Process Reengineering Of Recordation Division” project, to consider “standards and expectations of users with respect to searchability, possible ways by which submitters could redact or update their public information, and the feasibility of connecting to publicly held records and databases.”⁷
- In 2012, the Office published its One-Year Update on the progress of its Special Projects. Among other projects in which the Office made substantial progress, the Reengineering of Document Recordation project began stakeholder roundtable meetings.

Over the past year, the Office continued its active engagement with recordation issues. It reiterated the Office’s priority to enhance document recordation in testimony before the Senate,⁸ issued Notices of Inquiry regarding technological upgrades to its recordation function,⁹ assigned

its first Abraham L. Kaminstein Scholar in Residence to conduct in-depth study of recordation issues,¹⁰ and established research partnerships with the academic community, from which this report derives. Through its ongoing efforts, the Office is deeply attentive to new methods and technologies in improving the flow of ownership information.

II. METHODOLOGY

Through interviews with representatives from the Copyright Office, stakeholders, and other organizations, in addition to careful review of practices across the public and private sectors, the Office's internal registry procedures, and academic literature, this white paper qualitatively evaluates options that enhance the flow of copyright information. This is not a quantitative or empirical assessment of the Office's current practices. Rather, this report seeks to situate the Office within the broader copyright ecosystem, evaluate comparators inside and outside the intellectual property realm, and think deeply about the costs and benefits of a range of options available to the office.

To that end, this report paper investigates governmental information management systems, drawing on lessons from the PTO, foreign copyright offices, and real property recording, and private systems, examining collective rights organizations, and Creative Commons. It also draws upon analysis of legal mechanisms, such as extended collective licenses, presumptions, and statutory damages.

This analysis investigated legal scholarship focusing on the copyright information management system, including incentives for owners to provide information to the Office and the consequences of placing upon owners or users the burden of bearing the transaction costs of searches. Both domestic and international legal journals were reviewed, as well as some economics literature. It offers an overall assessment of public access to such information and the Copyright Office's role in managing it, and identifies alternative systems and options based on that assessment.

Consistent with its goal to offer a qualitative assessment of the Office's options, this report does not engage in an empirical analysis of costs, usage, or other metrics. Where such assessments may be appropriate, this paper identifies areas for "further research," and encourages the Office to engage in greater exploration.

III. FINDINGS: FORMAL GOVERNMENTAL RECORDATION

A. The United States Copyright Office

Among its many functions, the U.S. Copyright Office registers claims to copyright and records transactional instruments pertaining to copyrights. Beyond placing ownership of a work in the public record, timely registration entitles the owner to statutory damages and possible recovery of attorneys' fees in the event of infringement. As in real property recording systems, the recordation system documents all past transfers or mortgages, serving as a notice to other potential buyers the identity and condition of copyright ownership, and thereby facilitates future transactions. Since the Copyright Office has engaged in a full treatment of the registration function elsewhere, we will not address it here.¹¹ The following discussion provides an overview of the current legal landscape surrounding recordation, the challenges facing recordation, and possible solutions. One possible consequence of encouraging more copyright owners to record

transactional instruments, and of generally improving the process of recordation, would be to strengthen copyright ownership.

i. Recordation Practices

1) Legal Overview

The Copyright Act of 1976, 17 U.S.C. § 204, states that: “A transfer of copyright ownership, other than by operation of law, is not valid unless an instrument of conveyance, or a note or memorandum of the transfer, is in writing and signed by the owner of the rights conveyed or such owner’s duly authorized agent.”

The chief purpose of this rule is to resolve disputes between copyright owners and transferees and to protect copyright holders from persons mistakenly or fraudulently claiming copyright ownership. *See Imperial Residential Design, Inc. v. Palms Dev. Grp., Inc.*, 70 F.3d 96 (11th Cir. 1995). Judge Kozinski discussed the policy motivations behind the rigid requirement:

Common sense tells us that agreements should routinely be put in writing. This simple practice prevents misunderstandings by spelling out the terms of a deal in black and white, forces parties to clarify their thinking and consider problems that could potentially arise, and encourages them to take their promises seriously because it’s harder to backtrack on a written contract than on an oral one. Copyright law dovetails nicely with common sense by requiring that a transfer of copyright ownership be in writing. Section 204 ensures that the creator of a work will not give away his copyright inadvertently and forces a party who wants to use the copyrighted work to negotiate with the creator to determine precisely what rights are being transferred and at what price. Most importantly, section 204 enhances predictability and certainty of copyright ownership—‘Congress’ paramount goal’ when it revised the Act in 1976. Rather than look to the courts every time they disagree as to whether a particular use of the work violates their mutual understanding, parties need only look to the writing that sets out their respective rights.

Effects Assocs., Inc. v. Cohen, 908 F.2d 555, 557 (9th Cir. 1990) (internal citations omitted). In other words, the essential purpose of the writing requirement is to enhance certainty in copyright ownership.

Consistent with the aims of section 204, Copyright Act section 205 states that “Any transfer of copyright ownership or other document pertaining to a copyright may be recorded in the Copyright Office if the document filed for recordation bears the actual signature of the person who executed it, or if it is accompanied by a sworn or official certification that it is a true copy of the original, signed document.” Thus, to be recorded, a document must effectively conform to section 204’s writing requirement.

The recordation of transfers is important to establish priority between two or more conflicting transfers, or between a transfer and a nonexclusive license.¹² Section 205(d) states that for the latter transferee to prevail over the former, she must show that the later transfer was obtained in good faith for valuable consideration, without notice of the first transfer, and that it was recorded in the U.S. Copyright Office before the first transfer was recorded. If the first transfer was recorded within one month of its execution in the United States or two months after

its execution outside the United States, then the latter transferee is presumed to have received “constructive notice” of the transfer.

2) Overview of the Recordation Department¹³

The Recordation Department of the Copyright Office (“Office”) is responsible for recording legal instruments pertaining to the ownership and transfer of copyrights. Recording a document is voluntary. However, recordation will not have legal effect—for example, in priority disputes between conflicting transfers or for proof of constructive notice—unless the person submitting the document complies with the statutory requirements and Office procedures for recordation requests.

Currently, the Office employs nine Document Specialists, who review, catalogue, and record documents, and one Support Specialist, who scans documents, prints the certifications, and mails the certifications to the remitters. These specialists report to the Section Head. Of the nine total Document Specialists working in the Office, five are relatively recent hires.

On average, a Document Specialist catalogues roughly thirty-five to forty documents per week.¹⁴ Since Office employees have a forty-hour workweek, this translates to about an hour per document. However, the time required to catalogue a submission varies dramatically depending upon the instrument for recordation; some agreements concern hundreds of titles, while others may concern a single work. And newer, less experienced Document Specialists generally take longer to examine submissions than do more experienced Specialists.

In fiscal year 2013, the Office received approximately 11,900 documents for recordation in total. Of those, 556 documents pertained to rights to over 100 titles. Of those, 356 documents were notices of termination. The staff catalogued a total of 7,879 documents. The documents that have not been catalogued were either sent back—because the submission was incomplete or the instrument did not pertain to copyright—or presently remain in bundles awaiting processing.

While the Recordation Department receives submissions from many different industries, the motion picture industry and music publishing industry are the most regular sources of instruments for recordation.

3) Recording Instruments

Requests to record an instrument are mailed to the Office in Washington, D.C. Upon receipt of the submission in the Office, the submissions are bundled into packets of ten.¹⁵ Each Document Specialist takes one of the bundles to begin the process of recording. First, the Document Specialist reviews each submission to determine whether it meets the requirements for recordation. The law requires that an instrument for recordation bear an original signature or a sworn certification of any photocopy, be complete by its own terms, be legible, and be accompanied by the correct fee.

To help remitters satisfy the legal requirements, the Office created a document cover sheet, which can be found in an informational pamphlet called Circular 12.¹⁶ Although use of the document cover sheet is optional, it operates like a checklist for the remitter and generally facilitates recordation of documents. The Office requests that remitters send two copies of the document cover sheet with any submission.

In every submission, the remitter must include a photocopy or original copy of the instrument(s) for recordation, whether a transactional instrument, e.g., contracts, license

agreements, transfers, and mortgages; or other instrument, e.g., notices of termination, statements regarding the identity of authors of anonymous and pseudonymous works. Under 37 C.F.R. § 201.4(c)(2), the instrument must be “complete by its own terms.” Issues with this requirement arise with instruments that are heavily redacted or refer to missing attachments or appendices. When an instrument is redacted in a manner that omits important information, such as party information or the title of the works, the Office will sometimes decline to record it as incomplete by its terms. However, an instrument referring to missing attachments or appendices may still be recordable if the remitter submits the missing attachments, deletes the internal reference to the attachments and initials the deletion, or checks the box labeled “Document is not complete. Record as is” in section six of the document cover sheet. By checking this box, the remitter asserts that (A) the requested attachment is completely unavailable for recordation; (B) the attachment is not essential to the identification of the subject matter of the document; and (C) it would be impossible or wholly impractical to have the parties sign or initial a deletion of the reference. § 201.4(c)(2).

It is worthwhile to note that some sophisticated parties routinely submit “short-form assignments,” which are ancillary agreements to the principal asset purchase agreement or other principal transaction agreement. These short-form copyright agreements may also be attached to the principal agreements as an exhibit. *See* § 201.4(c)(2)(ii).

If a photocopy of the instrument is submitted, the remitter must include a certification that the photocopied document is a true and correct copy of the original document. The remitter can satisfy this requirement by placing his signature under the statement “I declare under penalty of perjury that the accompanying document is a true and correct copy of the original document” included in section seven of the document cover sheet.

Finally, the remitter must include the proper fees, in the form of a check, money order, or authorization to charge the remitter’s Copyright Office deposit account. Guidance on calculating fees for recording documents is also available on the Office’s website at <http://www.copyright.gov/document.html>.

In addition to examining the document for these statutorily required elements, the Document Specialist looks to see that the copy is of sufficiently high resolution to scan into the system, and that any schedules, appendices, or other attachments that the remitter has indicated are attached to the document are, in fact, attached. If any of these elements is incomplete, then the Document Specialist will telephone the remitter and clarify the matter. Document Specialists often see requests for recordation from the same repeat players, and so they tend to develop working relationships with many remitters. As such, fee issues are often resolved quickly, with remitters paying the correct fee via credit card over the phone or through their established deposit account with the Office, and missing attachments can quickly be emailed via PDF. However, if the Document Specialist is unable to resolve the problem, then the Office will return the documents unrecorded. A basic fee will be retained to cover administrative costs, and the remainder of the fee will be returned.

If a submission successfully passes through the examination process, the instrument for recordation is assigned a document identification number. It is now ready to be catalogued. The Office uses a system called “Cordocs” to catalogue the documents. Using the information contained within the instrument for recordation, Document Specialists manually enter the following into Cordocs:

- Recordation date (the date the recordation submission was received at the Office);
- Execution date (the date the agreement was executed);
- Party information;
- Heading of the recorded instrument (e.g., “Security Agreement” or “Assignment”); and
- Title(s) of the work(s), if given.

Sometimes, for an instrument transferring over 100 titles, the Office may make arrangements for the remitter to supply a thumb drive with the title information. If no title is given in the instrument for recordation, the Document Specialist will enter “no titles given” for the “titles” field. Once all the submitted information has been entered into Cordocs, the Document Specialist will review his or her own work for errors. Then, each page of the document is stamped with its unique number identifier (like a Bates stamp) and the Support Specialist scans the document into the Copyright Imaging System (CIS). OCR is not performed on the scanned documents. Finally, the Office will return the original documents to the remitter. The Office does not keep paper files of the submission.

One of the most commonly asked questions concerns change of address requests. Currently, those wishing to change an address for the purposes of copyright registration or recordation draft a document indicating the change of address as it applies to certain listed works. The Office records that document in a process similar to other instruments for recordation, but the Office does not validate the change of address. Someone who searched for the owner in Voyager can view the document number of the address change document and request a copy of the document from the Office. But the change of address does not automatically update the registered works or other recorded documents affiliated with the old address.

4) Viewing Recorded Documents

The public may access recorded documents in two ways: through the public document terminals at the Washington, D.C. Copyright Office, or through a written request to the Office. The public terminals, while practically restricting access to those in D.C., are nonetheless used by entities located outside D.C. Many entities that routinely require access to recorded documents hire local D.C. messengers to quickly retrieve the documents for them.

Users may also request copies of recorded documents directly from the Office. In order to obtain a copy of the actual recorded document, one must submit a written request to the Copyright Office. The Office will then access the scanned document in CIS and mail it to the requester. Upon request, the Office will “certify” a document, meaning that it attaches a statement under seal of the Copyright Office attesting that the document is a true copy of the record in question. Certified copies are often requested as evidence of the authenticity of documents when litigation is involved. In general, the written request for the record must identify: (1) the type of record desired (i.e., copy of an assignment); (2) whether the requestor requires a certified or uncertified copy; (3) the record(s) to be copied, including the volume and document number or page number. Requests containing the volume and document number will require payment of a basic fee; if the requestor cannot locate a volume and document number for the record, he will have to pay an additional search fee.

To determine the document number of a recorded instrument, a member of the public can access Voyager, the same online system through which the public accesses registration numbers,

titles, publication dates, and authorship information on registered works. Each week, the Voyager and Cordocs systems sync so that a user can search for newly cataloged instruments of recordation. For example, a Voyager search for the title “Forrest Gump” will reveal registration information for the book, motion picture, and soundtrack, in addition to the catalogue information for all recorded documents that pertained to works with the title “Forrest Gump.” These records are searchable by the criteria originally inputted in Cordocs: the title of the work, the title of the instrument for recordation (i.e., “The abominable snow rabbit & 30,007 other titles”), the dates of recordation and execution, the parties (i.e., Time Warner Entertainment Company, LP), in addition to the document number. Thus, by searching for “Forrest Gump,” one can see that a recorded document exists on file for that title and use the document number to submit a written request for the actual record from the Office.

5) Fees

Recordation fees are calculated by the number of titles the document contains.¹⁷ A document containing 1 title costs \$105, and there is an additional \$30 charge for each additional group of up to 10 titles. Thus, a document containing 2-11 titles costs \$135, and a document containing 12 titles costs \$165. The fee for special handling—which includes expedited service to meet contractual deadlines or for pending litigation—is \$480.

The Register of Copyrights is authorized to set fees by regulation, pursuant to the Technical Amendments Act, Pub. L. No. 105-80, III Stat. 1529 (1997). The statute provides that the Register “shall conduct a study of the costs incurred by the Copyright Office for the registration of claims, the recordation of documents, and the provision of services.”¹⁸ On the basis of the study, “[t]he Register may . . . increase fees to not more than that necessary to cover the reasonable costs incurred by the Copyright Office . . . plus reasonable inflation adjustment to account for any estimated increase in costs.”¹⁹ The fees should be “fair and equitable and give due consideration to the objectives of the copyright system.”²⁰ Finally, the Register must submit the proposed fee schedule with accompanying economic analysis to Congress for approval.²¹

Pursuant to these statutory requirements, the Register of Copyrights conducted a study of its costs in the second quarter of FY2008 (January 1 to March 31, 2008) and in March of 2009, submitted to Congress a report entitled “Analysis and Proposed Copyright Fee Adjustments to Go into Effect on or about August 1, 2009.”²² In this report, the Register noted that the costs of providing recordation services had actually increased, and accordingly proposed a single-title recordation fee increase from \$95 to \$105, and a per-title fee increase from \$25 to \$30.²³ The report does not discuss reasons why recordation services increased. Elsewhere the report discusses labor costs involved with paper registration forms, stating that:

To process these forms, the Office must digitize, manually enter and verify the information provided in the form, and process the accompanying check or money order even before substantive review of the claim begins. This is a labor intensive process resulting in increased processing costs.²⁴

Consequently, the Office proposed a higher fee to cover the increased cost. The similarity between the paper registration process and the recordation process suggests that the increase in recordation fees might also be related to labor costs. Indeed, elsewhere in the report, the Register reports that 80% of personnel costs are directly associated with one or more of the office’s fee services.²⁵

Comparison of electronic registration fees sheds light on the marginal efficiency gains in converting to an online filing system. The Register reported that the Office's conversion to electronic registration filing in 2008 "realize[d] substantial savings in not having to process a paper form, manually enter and quality-review input data, or process a fee payment."²⁶ Accordingly, the Register proposed maintaining registration fees at its previous \$35 amount to "reflect this [electronic filing] savings."²⁷ Since the Copyright Office typically applies a standard Consumer Price Index inflation increase to all fees, maintaining the fee at \$35 represents a real decrease. Notably, the Office stated that in the months following the introduction of its electronic filing system, use of the system expanded rapidly. The Office concluded that the lowered filing fee contributed substantially to the increased usage.²⁸

ii. Challenges Facing Formal Recordation

The Copyright Office has solicited feedback from stakeholders on its recordation practices through several forums, including administrative notice and comment inquiries and informal roundtable conference calls. The Office issued a Notice of Inquiry in March, 2013, requesting comments regarding: (1) "how stakeholders use the current online offerings . . . especially with respect to registration and recorded documents, and how the current offerings fail to meet, or exceed user expectations" and (2) "what online services, or aspects of existing services stakeholders would like to see developed in the future." Roundtable meetings with stakeholders canvassed similar topics. Broadly, stakeholder concerns centered around two main areas: (1) the difficulty, delay, and cost of recording a document at the Copyright Office; and (2) the unwieldy search functionality of the Office website.

Delay, Difficulty, and Cost of Recordation. The principal complaint by stakeholders concerned the delay in processing documents submitted for recordation. The FY2013 recordation statistics indicate that at least several thousand documents remain queued for examination. Users report waiting up to a year for the Office to record a document, and it takes even longer for a record of the document to appear in a Voyager search query.²⁹ Others routinely pay the additional fees for expedited processing, yet continue to wait a significant period of time.³⁰ Such wait times indicate that the Copyright Office's current procedures for recording documents are substantially impeding the accessibility of current information on copyrighted works.

Delay appears to arise at several points of the review process: Document Specialists review the entirety of the documents submitted for recordation, which appears to take an average of one hour per document. Where there are small mistakes, either in payment processing or with the attachments, for example, the Office spends time telephoning the remitter to fix the mistake. Some documents contain multiple work titles, sometimes up to several hundred in a single transfer, which the Documents Specialists key into the system by hand.

Stakeholders also complain about the absence of confirmation once they have filed a record. Clients often expect verification of the submission instantly similar to the PTO which issues a receipt immediately after filing. But clients are often forced to wait until the Office records the document to receive any documentation of the submission's acceptance.

Stakeholders note that the process for recording a document is encumbered by hand coding and a general lack of service and transparency. There is no fully online method for submitting a document for recordation; everything is done by mail. While the online Circulars guide remitters in the proper documentation to include with their submissions, remitters are responsible for calculating fees and ensuring that all the proper documents and attachments are

included, else the submission will be delayed. While useful generally, the deposit accounts that many repeat players keep with the Copyright Office can be improved by granting remitters greater access to information about their accounts so they can better monitor them. Users also report difficulty with later redacting or correcting an already submitted document.³¹ The Office is aware that these limitations may hinder its overall efficiency and remitters' satisfaction with the process.

Recording and viewing documents is also very costly. Some transfers involve hundreds or even thousands of titles, causing the cost of recording the document to increase significantly. For example, a large contract involving 400 titles will cost \$1305. Cost of filing is a particular concern for photographers, whose records often concern many titles and thus cost more to file. Users are directed to call the Copyright Office to inquire about fees for viewing documents and expediting requests for documents.

Records Search Functionality. Another common complaint about the Copyright Office's website concerns its cumbersome search functionality. Users typically employ the site to attempt to determine chain of title for a certain work. Yet the search tool does not allow the user to constrain by multiple terms at once when attempting to locate a certain record. Toggling back and forth across different records is slow and non-intuitive, and there is no easy method of saving one's search history or flagging certain records to return to later. Stakeholders would like to be able to browse from one record to the next, and easily navigate back to the original record. They also complain that documents are not linked with the registration information for the underlying work whose ownership is being recorded, or with other related documents such as prior transfers in the chain of ownership.³² Registration numbers that do appear in the records are not normalized, meaning that sometimes a number will be recorded with leading zeros, and other times with hyphens, etc. Titles of works or party names are sometimes misspelled or contain errors. Individual elements within a group registration are not accessible. And when a user is finally able to locate a record, the information made available about that record is limited.

iii. The Orphan Works Problem as a Symptom

Orphan works are in-copyright works for which insufficient ownership information exists to enable users to request permission for use. Without ownership information, the market for copyrighted works is stunted because potential buyers (or users) cannot effectively purchase the right to use a given work. Consequently, individuals in the market for works without readily accessible ownership information must risk a future infringement finding or walk away. Copyright owners are also harmed because their pool of potential licensees necessarily diminishes when potential buyers cannot purchase their works. Given the extremely long copyright term, these market failures have the potential to multiply over the many years that a work is under copyright protection. The Copyright Office, scholars, artists, and industry have devoted great attention to the orphan works problem through reports, comments, and articles. But despite the great attention paid to orphan works, empirical data outlining the complete scope of the orphan works problem is elusive.

In the 2006 Orphan Works Report prepared by the Copyright Office, the scope of the problem was determined by notice and comment responses, which may offer only a partial representation of the actual scope of the problem.³³ Half of the responses identified a problem with orphan works under the Copyright Office's guidelines, which suggests that the problem is at least relevant to the stakeholders that responded.³⁴ In the notice of inquiry issued on January 15,

2014, the Copyright Office stated that fewer than half of the works that have been identified from recorded documents were identified using a unique registration number.³⁵ If the Copyright Office locates works, it is through titles that have no uniqueness requirement. Thus, even for works that *are* registered and recorded with the Copyright Office, ownership information is not easily accessed. According to a 2010 study conducted by the European Commission Directorate General on Information Society and Media, the percentage of orphan works is troubling both in Europe and America. For example, the study states that ten percent of the 25,000 films and television programs in the collections of UCLA Film and Television Archives are orphan works.³⁶ The report also states that only 174 of the 10,000 books printed in 1930 were reprinted in 2001.³⁷ Further, as of 2010, ninety percent of the total photograph collections in European museums were presumed orphan works.³⁸ These statistics illustrate that the orphan works problem is not limited to any particular country. It is a symptom of antiquated registration and recordation systems across the world.

The orphan works problem begins at registration. Following the requirements of the Berne Convention, the U.S. Copyright Act does not require registration as a condition to copyright protection. Although the United States is free to make registration a requirement for U.S. works *only*, it has followed the international trend and elected to offer protection to domestic and foreign copyright works without any formality requirements. This paper focuses almost exclusively on recordation, but it is worth noting special barriers to registration for visual artists.

Visual artists such as photographers, illustrators, painters, and the like face special barriers to registration because of the sheer volume of works they produce in any given time period. Unlike the writer or movie producer, a single photographer may produce hundreds of thousands of works in a single month.³⁹ Under the current regulatory regime, photographers may use a special group registration option to register their “published” photographs.⁴⁰ This allows an author to register a collection of photographs for the price of one registration. However, photographers must organize their photographs in “unpublished” and “published” groups before submitting their registration.⁴¹ Published and unpublished photographs may not be submitted in the same group. It is unclear whether a photograph is published by virtue of online transmission or display. The Copyright Office encourages each author to decide for him or herself. Thus, in addition to paying the fee for each group registration, photographers must incur additional expenses, both for sifting through their vast repertoire of works to separate the photographs into these ambiguous categories and filing separate published and unpublished group registrations. According to The American Society of Media Photographers (ASMP), these procedures discourage many photographers from taking advantage of the group registration option for fear they will improperly classify a photograph as published or unpublished and because of the significant time required to attempt such a classification. Given that the publication status is really only relevant during litigation, many stakeholders have suggested removing this classification requirement at registration, at least for photographs.

While photographers may enjoy some benefits of group registration, visual illustrators and other graphical artists do not.⁴² For many—if not most—illustrators, the process of creating a work includes many sketches and drafts that can easily amount to hundreds of works for a single project.⁴³ Because these authors are not eligible for group registration, to register these works properly would cost hundreds to thousands of dollars, something most artists cannot afford.

Many stakeholders have recommended extending the group registration option to *all* visual artists, not just photographers

Given the special difficulties of registering visual works, it is not difficult to understand the barriers to recordation of these works. In order to record transfers with the Copyright Office, visual artists would have to pay a hefty fee based on the number of works involved. Additionally, many visual artists consider licensee information—including exclusive licensees—proprietary.⁴⁴ Conversations with stakeholders revealed that many exclusive licensees of works request—or require—that the license not be disclosed.⁴⁵ Some clients do not want the image itself to be disclosed because it is confidential, such as drawings for a patent until the application is released. The information may also be proprietary because the visual artist may not want to disclose their clients to potential competitors that can offer similar services for lower prices.⁴⁶ Finally, many stakeholders reported that visual artists choose not to record transfers because of the futility of filing such an instrument when compared to the expense. The searchability of records for visual works records is especially dismal. Without some conference of benefits, many—if not most—visual artists elect not to register or record their works with the Copyright Office.

Given these circumstances, it is not difficult to understand why, as the EU report suggested, the orphan works problem is especially troubling for visual works. But even though other works may be more readily identified in comparison, the orphan works problem still exists for them as well. For example, as was stated in the recent Google Books case opinion, Google scanned over twenty million books into their library between 2004 and the time of the opinion in 2013.⁴⁷ In the most recent opinion, their use of these books without regard to whether they were in copyright or any attempt to obtain permission from the authors was deemed fair use, in large part, because of the transformative nature of the project.⁴⁸ Even if this constitutes the definitive answer, the case took ten years of expensive litigation to determine whether it was fair use for Google to make use of books that were largely out of print and the battle may not be over. This market failure was very costly for both parties and may have deprived the public of books that the authors would have been interested in making available had their contact information been readily accessible. Although other examples of the orphan works problem may not attract as much publicity, the Google Books case serves to illustrate the potential costs of the orphan works problem. As social media platforms take on an increasing role in our society, the orphan works problem has the potential to escalate. Millions of users create anonymous websites on which they post copyrighted works such as pictures, songs, and blogs. Even websites maintaining some user data such as Facebook or Twitter allow users to “share” links such that the original owner may be lost in the trail as a work is passed from one user to another. Crafting a solution to the complex orphan works problem becomes increasingly important to mitigate how social networks and digital technologies can blur ownership. That said, there is no “easy” fix.

Even if the Copyright Office were to implement a robust registration and recordation system in the future, there still exists a vast volume of works and transfers that remain unregistered or recorded. These works would have to be manually input into any such system, which would likely be very costly. Further, it is not clear whether the creation, implementation, and back-filling of an ideal registration and recordation system with all previous records would solve the orphan works problem. Given the costs of implementing such a system, a fee for recordation and registration will likely be required for some time after a new system’s creation. This will deter participation in the system. While a patentee must participate in the system to obtain protection, a copyright owner does not. Moreover, increased participation in a recordation

and registration system may increase the likelihood of fraud. Given these and other considerations not mentioned, further research is necessary to determine the effectiveness creating a robust recordation and registration system as a treatment for the orphan works problem with an understanding that no one treatment will be a cure.

Some countries have addressed the problem of orphan works through legal regimes that may be used in conjunction with or in lieu of a revolutionized recordation and registration system. For example, the EU promulgated a directive requiring member countries to enact legislation that would allow users to make available to the public works that have been orphan after a “diligent” search has been performed under the guidelines set forth in the directive.⁴⁹ Member states are encouraged to develop guidelines that determine what constitutes a “diligent” search under the directive.⁵⁰ Licensed cinematographic, audiovisual, and phonograms are excluded from the directive.⁵¹ Revenue from such use is only allowed “for the exclusive purpose of covering their costs of digitizing orphan works and making them available to the public.”⁵² Rights holders retain the right to forbid using the work and demand fair compensation.⁵³ A wrongful determination that a work is “orphan” following a search that was not diligent entitles the right holder to the full array of available infringement remedies.⁵⁴

Canada has created a Copyright Board that has authority to issue non-exclusive licenses for the use of orphan works to users whose “reasonable efforts” to locate a copyright owner have been unsuccessful.⁵⁵ There are no formal requirements on what constitutes a “reasonable effort.” The Board’s authority allows it to set the terms and conditions of the license and may address territoriality, duration, retroactivity, price and payment, attribution, revocability, and transferability issues. According to the study, as of 2009, there were 411 files opened covering 12,640 orphan works.⁵⁶ Half of all requests resulted in the user receiving a license.⁵⁷ Applicants included businesses and organizations (37%), individuals (31%), educators/institutions (13%), government (11%), galleries and museums (3%), with the remainder comprising community and charitable organization groups.⁵⁸ The study reported that the total value of royalties payable for licenses issued was under \$70,000, thirty percent of which was contingent on locating the number while the remaining seventy was payable immediately to a collective society.⁵⁹

Hungary has adopted a licensing system for users that conduct a “due diligence” search for owner information with sector-specific criteria for what constitutes a diligent search.⁶⁰ The license is non-exclusive, valid for a maximum period of five years within Hungary, and is not transmittable.⁶¹ If the rights holder reappears, the license will be revoked with the option of continuing existing use for a period of one year.⁶² The affect of these and other legal measures remains to be seen, but taking such legal steps does not address the registration and recordation issues that countries around the world face.

These legal regimes may prove useful in the future for designing incentives for registration and recordation of orphan works. However, until a robust registration and recordation system is implemented, searching woefully incomplete databases will not likely produce the ownership information sought and legal “incentives” run the risk of stripping copyright owners of their rights without a fair opportunity to participate in the system. Many stakeholders have lamented that discussion of solutions to the orphan works problem most often result in owners *de facto* losing rights to their works. Even without formal requirements for copyright protection, these stakeholders feel that allowing an individual an “orphan works defense” if a “reasonable” search has been conducted is effectively stripping them of their rights.

Under the current system of registration and recordation, they may have a point. As has been discussed at length, the current records of the Copyright Office are anything but complete and not easily searchable. What ownership information is collected is only accessible to the public by request. To penalize a copyright owner for not placing ownership information within this system seems problematic. Conversely, without legal incentives in place, it may be difficult to convince copyright owners to register and record their information in order to complete the system. It seems as if a balance between protecting the copyright owner's rights and also completing the amount of ownership information available to the public must be found.

B. Literature Review

While relatively few scholars have directly addressed the problem of improving access to ownership information, several have analyzed the place of the Copyright Office itself, trying to determine how the Office can improve its operations and what additional steps it might take. Scholars looking at the internal operations of the Office have suggested a few possible improvements, although unfortunately no one has given a clear picture of the hurdles that might lie in the way.

Some scholars have examined the Copyright Office's registration and recordation functions, identifying current shortcomings and potential fixes with the goal of addressing the orphan works problem. Looking at the registration function, Joshua Mausner identified two main impediments to the Office's ability to make more ownership information available: cost and searchability.⁶³ Mausner pointed out that the primary cost concern came from the need to digitize and add older, paper records to potential databases; aside from the one-time costs of setting up an online submission process, adding new registration information to a database would be virtually free. Regarding searchability, Mausner (as others have suggested) recommended the use of image recognition technology to deal with the search problems posed by pictures, as well as optical character recognition and other text scanning technologies to make searching paper works feasible.

As a means of improving ownership information, Megan Bibb has suggested that the Office leverage the fruits of its prior registration work. Bibb recommended that the Office make its database of copyright renewal information available online (covering the period of 1923-1964 when renewal was required to secure the second 28-year term of copyright). Doing so would better inform potential users of which works have already fallen into the public domain and which still enjoy protection.⁶⁴

A creative proposal for dealing with the transaction costs of licensing copyrighted works comes from Genevieve Rosloff's suggestion of adding a licensing system to the Office's registration and recordation operations.⁶⁵ Rosloff proposes that when authors submit works to the Office, primarily through registration, the Office could provide them with a menu of rights, and authors could select which rights they wish to retain and which they wish to release to the public or make available for licensing. Rosloff offers such examples as an author categorizing their work as noncommercial use only, or use permitted but only with attribution, and she also discusses limiting remedies depending on the author's desires. In order to reduce the burden on authors, Rosloff imagines a system whereby authors could select different tiers of protection, with each tier requiring its own discrete fees and procedures. For example, "the 'basic' registration might entitle the registrant to statutory damages and attorneys' fees as well as the right to prepare derivative works for commercial purposes."⁶⁶ Although Rosloff presents this

system as part of a larger reform (she suggests that a lower level of protection should be the default for most works), it could also function as a voluntary system. This proposal, if implemented, could also provide an incentive to recordation and registration.

C. Comparisons Domestic and Abroad

Domestic and foreign copyright entities provide lessons that may help to guide changes in Copyright Office recordation and registration practices. While this section summarizes those practices across an array of entities, the Options and Tradeoffs section distills general observations that may be relevant to Copyright Office procedures.

i. Real Property Recording

The Real Property System (“RPS”) may be the exemplar of the recordation of ownership information. The RPS is predicated on the deep and longstanding desire to have high levels of land development, which requires confidence in land titles. As such, the RPS is built on a foundation of strict formalities. Recording statutes require users to record instruments affecting title to lands by providing severe consequences for failure to do so. Documents affecting real property must be recorded in the office of the county clerk where the real property is located.

Recording statutes get their power by limiting the validity and effect of unrecorded instruments. Three different types of recording statutes are found in the United States: the “race” statute, the “notice” statute, and the “race-notice” statute. A race recording statute protects the party who records his or her conveyance first, regardless of any actual notice of prior unrecorded instruments.⁶⁷ Conversely, a notice recording statute protects a bona fide purchaser whether he or she records first or not.⁶⁸ A race-notice recording statute combines restrictions found in both the race and notice statutes, providing that an unrecorded conveyance is invalid against a subsequent purchaser who records first and does not have knowledge of any prior unrecorded instruments.⁶⁹ The race-notice system is the conceptual source for § 205. While providing different effects and consequences, all recording statute types are aimed at giving constructive notice to all instruments recorded in the county property records.

The RPS owes much of its success to the hand-in-glove way in which private title companies work with county recorder’s offices. Given the massive costs associated with fully and accurately determining chain of title, private title companies use their scale to efficiently and comprehensively collect, maintain and update ownership information about plots of land in a county. Complementarily, county recorder’s offices have updated their services to electronic methods that streamline their ability to perform their statutory duty. This mutually beneficial system between private actors and government entities provides a model for how the Office could cooperate with private sector entities like collecting societies.

As the other party to the hand-in-glove operation, county recorders maintain permanent public records involving a wide variety of instruments. Accordingly, county recorder's offices record all deeds, mortgages, leases, liens, and other written instruments that are legally required to be recorded. These instruments are recorded and appropriately indexed to give the public notice of their existence and for safekeeping and future reference. These records are the legal basis for determining ownership.

The general practice is that, upon presentation of a written instrument for recording, the county recorder’s office indorses the instrument with the date and time of its presentation, and gives the instrument a file number. In a typical system, filing numbers are consecutive in the

order in which the instruments are received, with some exceptions that require financing statements to be filed separately under a different series of file numbers. Each instrument is then kept on file, in a queue, in the same numerical order until it is recorded. When a deed or other instrument has been recorded, the county recorder's office then indorses the instrument with the time when recorded and index information of where the instrument can be found in their records.⁷⁰

County recorder's offices are not required to determine the validity of the instruments presented to them or to ascertain whether the instruments are genuine or forged. Consequently, county recorder's offices spend very little time examining documents. The staff at county recorder's offices only checks instruments to make sure certain legally required information is present. This includes basic information such as grantor and grantee, and dates of transfers. Any controversies about the validity of the instruments presented to county recorder's offices remain with private individuals.

Looking to private title companies, their primary function is to determine the legal owner of the property. This gives buyers confidence that the party they are purchasing from is the rightful owner. To ensure that a title is valid, a private title company will perform a title search to confirm that the person or company claiming to own the property does, in fact, legally own the property, and that no other person or company could claim full or partial ownership of the property. The process of performing a title search involves accessing the official land records, kept at county recorder's offices, for the relevant parcel of property. Private title companies almost always use their own privately held databases of abstracts, giving them an advantage in efficiency.

Traditionally, using written documents, private title companies conduct title searches by creating a chain of title to determine the quality of title held by the party wishing to convey real estate. Because of the traditional indexing systems of paper documents, for the most part, a document-only chain of title can only be discovered through successive grantors. However, as counties are converting their records to electronic databases, these documents can now be indexed by grantee and by specific property as well. By providing the ability to perform title searches through grantees or through the specific property, many of the past problems created by late, early or non-recorded deeds have fallen away.⁷¹

Digitized records make title examination easier and more efficient. With the use of electronic recording in county recorder's offices, now used in about 1,100 counties,⁷² documents can now be delivered to the county recorder's office through an electronic process. Because these documents are usually in a digital image format when received, county recorder's offices are saving time and resources because they don't have to scan numerous documents for archival purposes, and private title companies are also able to handle this type of recording more economically because of the ability to do everything from behind a desk.

Private title companies and county recorders' offices work closely together. In a typical scenario, when a private title company has documents that are ready for electronic recording, a private title company's employee will log onto the company's e-recording webportal, scan the documents to be recorded, and then send the documents to the county recorder's office. The documents automatically go into a recording queue to be reviewed. The county recorder's staff then reviews the documents to verify that they meet the legal standards necessary for recorded documents.⁷³ If approved, the documents receive an electronic stamp that contains the recording

information. If they are not approved, the private title company immediately receives a message on their webportal. After recording, the private title company instantly receives the recording information placed on the documents.⁷⁴ Electronic methods have strengthened the partnership between private title and county recorder's offices, providing confidence in land titles.

ii. The Patent and Trademark Office

Within the United States Patent and Trademark Office, the processing and recording of assignment documents for both patent and trademark falls within the Assignment Recordation Branch in the Public Records Division of the Office handles properties. Any questions that customers of the service may have are directed to this branch.

The USPTO website, located at www.uspto.gov, contains an Electronic Patent Assignment System (EPAS) that allows users to create and submit a Patent Assignment Recordation Coversheet by completing on-line web forms and attaching the required legal documentation as black-and-white TIFF or PDF files.⁷⁵ The USPTO website also contains a searchable database called the Assignments on the Web for Patents (AOTW-P) that allows users to search the database of all recorded patent assignment information from 1980 to the present (any assignments recorded before 1980 are maintained at the National Archives and Records Administration). For trademark assignments, those seeking recordation of assignments can use the Electronic Trademark Assignment System (ETAS) which employs the same process of creation and submission of on-line web forms with supporting legal documentation as used by EPAS. A document is recorded when the PTO puts the information submitted to it in the public record. The Office does not verify the validity of the information and it describes its function as "ministerial" in that it neither makes a "determination of the legality of the transaction nor the right of the submitting party to take the action."⁷⁶

Although the Office does not verify the validity of the information in the document, a document may, nonetheless, be deemed "non-recordable" for each of the following reasons: "(1) a critical piece of bibliographic information was omitted from the cover sheet; (2) the document itself is illegible or of such poor quality that it cannot be scanned electronically, or (3) the correct fee was not paid."⁷⁷ Accordingly, the requirements for recordation (37 CFR 3) are to "(1) specify the minimum information about the transaction that must be submitted; (2) require submitters to submit this information of (sic) a separate cover sheet; and (3) specify that submissions must be legible and of such quality to permit processing; and (4) pay the proper recording fee."⁷⁸ Lastly, the rules permit the submission of "true copies of assignment-related documents" but "original documents are not required nor desired" since they will not be returned.⁷⁹

The processing of assignment-related documents is managed through an image-based workflow management system called the Patent and Trademark Assignment System (PTAS).⁸⁰ Paper documents are manually scanned into the PTAS while documents received electronically through EPAS and ETAS are electronically scanned into the PTAS system.⁸¹ The PTO transcribes bibliographic information concerning the properties and parties involved in the transaction from the manually scanned image if the requesting party chooses not to enter this information at the time of the submission through ETAS or EPAS.⁸² This bibliographic information is entered into the USPTO Assignment Historical Database and is reviewed for completeness.⁸³ At this time the documents are determined to be either recordable or non-recordable.⁸⁴

Once the images of the coversheet and document are deemed recordable they are automatically assigned reel and frame numbers and put on searchable media such as microfilm and CD-ROM.⁸⁵ PTAS software superimposes onto these images the assigned reel and frame numbers, the official recordation date stamp and the payment information.⁸⁶ The PTAS then generates a “Notice of Recordation,” which is returned to the correspondence address on the cover sheet.⁸⁷ Any documents that are non-recordable are returned to the customer with a “Notice of Non-Recordation” giving the reason for non-recordation.⁸⁸

The assignment documents submitted are not read by the PTO since everything that is required for the public record, including all of the searchable information, is transcribed from the cover sheet.⁸⁹ Accordingly, the PTO does not compare what is in the cover sheet to the underlying document in order to determine what data should be entered or attempt to identify and resolve any discrepancies.⁹⁰

When submitting a record electronically, users must use the USPTO’s coversheet, which is in a web form online.⁹¹ This online form is called the Patent Assignment Recordation Coversheet and it records information the following information about the assignment: conveyance type (e.g. mortgage, license, security agreement, or change of name), correspondence information, conveying parties, receiving parties, and the identification of the property in question by either the application number, patent number or, PCT number (for an application filed under the Patent Cooperation Treaty agreement).⁹² For the recording of assignments related to bulk properties there is an option to paste a list of property numbers.⁹³

Additionally, on the AOTW-P, on a webpage entitled “Patent Assignment Query Menu,”⁹⁴ users can search for assignments by reel/frame number, patent number, publication number, assignor name, assignor index, assignee name, assignee index or assignor/assignee name.

Assignments filed online by EPAS or ETAS are generally recorded within hours of submission.⁹⁵ Moreover, recording a patent assignment is free if submitted electronically.⁹⁶ If not submitted electronically, however, the cost is \$40 for each assignment, agreement or other paper, per property.⁹⁷

iii. Foreign Copyright Offices

The Berne Convention says very little about copyright ownership and transfers.⁹⁸ However, many member countries have developed their own legislation and policies governing such issues. Comparing these countries’ experience with recordation informs the feasibility and benefits of several of the above-proposed solutions, in particular, the feasibility of implementing a standardized, electronic recordation form.

1) The United Kingdom

Copyright in the UK is “transmissible by assignment, by testamentary disposition or by operation of law, as personal or moveable property” under the United Kingdom, Copyright, Designs and Patents Act 1988 § 90(I). As in the United States, legislation requires transfers to be documented by a written instrument, signed by the grantor.⁹⁹

The United Kingdom offers users a form for recording “transfers of registration” through its UK Copyright Service (UKCS) website.¹⁰⁰ The website indicates that “[t]his form is used when the UKCS account holder has sold, given or otherwise transferred their copyright of a registered work to a new owner. It should be completed after or during the sale or transfer of the

copyright.”¹⁰¹ The record also preserves the original date of registration as evidence. Thus, by completing the form, the website states that transferees “can benefit from the protection that registration provides without the need for re-registration or any lapse in cover.”

In order to conduct a transfer of registration, users are instructed to complete the form online, print and sign the completed form, and mail the form to the UKCS with the requisite processing fee. The online form lists required fields including: the title (i.e., Mr. or Ms.), first and last names, country, and mailing address of the current UKCS “account holder” (the transferor) and “new owner” (the transferee), and the registration number and title of the work. Optional fields include the company, telephone, and email address of the parties to the agreement.

Supplementing the UKCS is a user-information website called the “UK Copyright Hub,” available at www.copyrighthub.com.uk. The Copyright Hub was launched by a group of industry representatives, called the Copyright Hub Launch Group. Representatives range from companies like the BBC, to Getty Images, to the Creators Rights Alliance, to the British Library.¹⁰² The Group’s Chair is Richard Hopper, author of the “Copyright Works” report for the UK Government’s Digital Copyright Exchange feasibility study.¹⁰³ As the website explains, the Copyright Hub “points you in the right direction whether you want to learn about copyright, get permission to use somebody else’s work or find out about protecting your work.”¹⁰⁴ The website points potential licensees and copyright holders to pages describing FAQs about copyright, or the relevant pages of private database websites, depending on the user’s need. For example, a user seeking permission to use a musical work has the option of clicking such links as “Where to look for music you can use legally” or “Using someone else’s music in something you’re creating.”¹⁰⁵ Clicking on the former directs the user to websites by Getty Images or Music Matters, private services that offer music licenses for purchase. Clicking on the latter directs the user to PRS or PPL, collecting societies offering blanket licenses. The websites offer similar information for authors seeking copyright protection, guiding them to general information about copyright registration and licensing organizations.

At present the website’s functionality is generic, directing users to possible resources based on interest areas. The Copyright Hub itself does not allow a user to determine the ownership information of a particular work. For example, a Copyright Hub user wishing to license Adele’s song entitled “Rolling in the Deep” might be properly directed to PPL’s website to make additional inquiries, but a Copyright Hub search will not reveal directly the ownership information for “Rolling in the Deep.” The Copyright Hub Launch Group’s vision is to evolve the Hub “from a signposting tool into an intelligent ‘router’ . . . able to carry out federated searches (i.e. sending queries to rights managers’ databases, and returning results back to users on the Hub).”¹⁰⁶ This would enable users to determine whether databases linked to the Hub hold rights to the work the user wishes to license. In the third stage of evolution, the Group hopes to develop an “aggregated search function . . . [to] make it easier for creators to register rights information with third party registries linked to the Hub.”¹⁰⁷

The Copyright Hub remains a work in progress. The project received some government funding at its inception, but its future funding stream might incorporate a fee structure such as a membership or subscription fee, or taking a percentage of licensing fees paid through the platform.¹⁰⁸

2) Canada

The Canadian Copyright Act allows free assignment of copyright.¹⁰⁹ As in the United States and United Kingdom, Canada requires a written instrument, signed by the grantor, to effect a transfer of copyright.¹¹⁰

The Canadian Intellectual Property Office (“CIPO”) follows a guided remitter responsibility model of recordation. Members of the public wishing to record a copyright assignment or transfer, also termed “Filing a Grant of Interest,” can either file it online or submit it by fax or mail.¹¹¹ The online form requires users to create an account through the electronic system (also called “CIPO”).¹¹² Upon creation of an online account username and password—setting up an account takes about two minutes—the user can navigate to the form for filing a grant of interest. The form provides fields for the following required information: work registration number or old registration number or title of the work (if the work is not registered); the “Grant of Interest – Action (*Title of Legal Agreement*)”; “Assignor” information, including family name, first name, and address; and the “Assignee” information, consisting of the same fields as the Assignor. The form provides optional fields for the telephone, fax, and email addresses of each party. Then, the form requires the submitter to attach the agreement in electronic format. There is a box giving information on filing fees and a payment box, offering the option of paying via credit card or deposit account. And finally, the submitter has the option of including comments.

Upon the receipt of the online form, the Copyright Officer quickly reviews each submission for a signature and completeness, and then permits the document to be recorded in the system.¹¹³ The Canadian website indicates that any deficiencies in the request will prompt the Office to issue a notice within one week of filing of the request. If all the requisite information has been correctly entered, then the “certificate of registration” will issue in approximately two weeks.¹¹⁴

For paper applications, the Copyright Officer manually scans the document and fills in the fields by herself. Members of the public are then able to search for those documents online on CIPO in a manner similar to the U.S. system. They request the actual documents from the Office.

The Copyright Officer is the sole officer in charge of copyright in Canada; this includes registration and recordation.¹¹⁵ It is estimated that the Office receives only about 8,000 registration applications each year, though an estimate of the number of recordation requests the Office receives is unavailable.¹¹⁶

According to the Canadian Intellectual Property Office’s website, recording a document costs \$65 Canadian dollars (CAD), which roughly equates to \$58 U.S. dollars (USD). This fee is set; costs do not escalate for documents containing more than one title. Obtaining an electronic or paper copy of a recorded documents costs \$1 CAD per page, and \$35 CAD for the certification.

IV. FINDINGS: PRIVATE RECORDATION

A. Collecting Societies

Copyright collecting entities, such as ASCAP, BMI, SESAC, and the Copyright Clearance Center, operate under roughly the same model. To facilitate access to their members’

works, collecting societies uniformly (1) provide online title registration; (2) maintain searchable databases, including writer, publisher and, when applicable, recording artist information; and (3) allow individuals to search by creative means, such as business type, to find a license that best suits their individual needs.

ASCAP is the largest musical collecting society in the United States, with a membership of more than 500,000 US composers, songwriters, lyricists and music publishers.¹¹⁷ Through agreements with affiliated international societies, ASCAP also represents hundreds of thousands of music creators worldwide. As a result of the efficiencies achieved by their scale and internal data-processing, more than 88¢ of each dollar ASCAP collects goes to members in royalties.¹¹⁸ Copyright Clearance Center (“CCC”) is the written-work analog to ASCAP, BMI and SESAC. CCC offers a range of licensing options for businesses from pay-per-use services and annual licenses to content rights advisory solutions.¹¹⁹

Even though collecting societies all have dedicated teams that are responsible for actively seeking new members and works, prospective members usually are the initial actors when it comes to joining a collecting society. Prospective members encounter few if any barriers to entry. ASCAP, for example, accepts any publisher actively engaged in the publishing business, and any composer or author of musical works with at least one work published.¹²⁰ Similarly, CCC accepts nearly all written texts.¹²¹

Once accepted into a collecting society, each new member executes an assignment, vesting in the collecting society the right to license, upon a non-exclusive basis, the member’s works. Most relevant details about the works are conveyed to collecting societies through these assignments. To keep track of all this material, collecting societies maintain extensive data collection and processing systems, cataloguing member information and ownership information of members’ works.

Collecting societies generally make their members’ contact information available to the public. Normally, unless a publisher specifically requests in writing that its contact information not be made available to the public, all publisher contact information is provided to anyone who requests it from the collecting society. This makes the system more open, as individual actors are able to directly contact publishers for licenses or transfers.

Collecting societies also record all license information, including the title of the work, the name(s) of the writer(s) and publisher(s), the name and address of the licensee, the territory, medium and venue covered, and the period of the license. This recordation system is powered by busy IT teams, which benefit from the data software and hardware specifically created to acquire, store, and maintain the information. Prospective licensees are generally the actors who contact the collecting societies for licenses, and the owners of the rights often don’t play a part in this process. When owners of the rights are involved in this process – i.e., when rights owners directly license their works to individuals and entities – they are required to give notice to the collecting societies. Because all license information is kept in a centralized location, collecting societies have near-perfect information on who has rights to each and every work in their repository.

Collecting societies have adopted a system of uniform number coding used to link works with their rights owners, and rights owners to their collecting society affiliation. This system is overseen by the International Confederation of Societies of Authors and Composers (“CISAC” in accordance with its French name: Confédération Internationale des Sociétés d’Auteurs et

Compositeurs). Once a writer's or a publisher's membership in a collecting society is accepted, the collecting society will apply for a unique "interested party identifier ("IPI") for that unique member. The IPI is thereafter associated with the author or publisher, even if his or her or its collecting society affiliation changes. As a result, if, for example, a writer leaves ASCAP and joins BMI, he or she retains the same IPI. When the IPI is used in connection with other data, it has the tremendous utility of maintaining a chain of title between rights owners with their works, no matter how many organization shifts or successive transfers of rights occur.

There is currently no system in place that integrates this ownership information to the Copyright Office's databases. Collecting societies don't submit copyright registrations for their members, nor do they handle renewal registrations or termination right notices. Thus, a collecting society member must take the affirmative steps of sending their information directly to the Office for registration. While slight, this is a real cost of time and resources for creative work rights owners, and has a tangible affect on the copyright marketplace.

B. Creative Commons

i. Facilitating Transactions through Free Legal Tools

There are some communities within which transactions operate outside of the traditional incentive models of creation and recordation. Copyrightable works are shared without need for permission, because ownership information, as well as the rights reserved by the owners of the works, is provided alongside them. A good example of this type of community is Creative Commons, a nonprofit organization that "enables sharing and use of creativity and knowledge through free legal tools."¹²²

In the context of Creative Commons, the term community must be defined. Creative Commons is not an online community in the traditional sense because it is not a central hub for the communication of its "members" or those who use their licenses. Moreover, Creative Commons is not actually capable of keeping track of the use of their licenses web-wide. The community is defined by the shared use of the various licenses provided by Creative Commons and the types of uses of the created works thereby allowed. Through the use of these licenses creators are able to disseminate their works with ownership information attached to them as well as directions for the content's use.

By providing legal tools that serve as both a notice of ownership of the copyrighted work and the terms for its licensing, Creative Commons effectively lowers the barriers for transactions between owners and subsequent users of these works. There is no need to either advertise or inquire about the kinds of uses that can be made and therefore, transactional costs have been lowered. Furthermore, licensing tools that exist alongside works on the Internet reduce the potential number of orphan works that exist in the Internet space. Lastly, the uniformity and standardization of these licenses are a potential advantage to their use because owners and licensees know what to expect because they will have likely encountered these licenses in previous transactions.

Through Creative Commons, the legal tools needed to license the various uses of copyrighted works have been provided in a clear and simple way for those inclined to disseminate their creative works with limited restrictions. Therefore, one avenue for the Copyright Office to explore is the possibility of offering free, standardized licenses that creators with or without profit motives can use. These standardized forms would contain all of the

necessary information for public recordation and search and would also help enable quicker recordation of that transaction with the Copyright Office. Furthermore, to incentivize recordation, these licenses could be recorded at a discounted price. The discounted price would reflect the decrease in processing time due to the standardized forms.

ii. Fostering Communities of Creators

In addition to providing free legal tools to those inclined to share their works with the public and facilitate their use, Creative Commons has enabled various communities to form around the use of their licenses. One such example is ccMixer, a “community music remixing site featuring remixes and samples licensed under Creative Commons licenses.”¹²³ Users can download and sample music from the site, submissions to which are clearly marked with the license that applies to them. Those who use and sample the music can post their remixes to their own sites as long as they are not making commercial use of the remix (unless the license authorizes them to do so). Moreover, on the ccMixer site, each song gives a derivation history of the use, showing the samples used and the individual license of each sample. Intriguingly, this community is built around a model of sharing with few direct economic incentives contemplated for the creation and economic value of works. For instance, some artists may license their works freely to build a fan base, which can then be capitalized on by tickets sold to a live performance. More to the point, however, is that ccMixer is an example of a *social media* outlet (there are usernames and forums) that posts copyrightable content to the web and simultaneously “clears title” to that content by granting permission to its use upfront. A lot of the content on the web that is copyrightable has similar features regarding the circumstances of its creation: users create with the intention to *share* (perhaps creating some social cachet along the way that may prove economically valuable down the line) not to reap profits from that particular work.

Instagram is a good example of this model. Users post pictures and short videos onto their accounts, which can be “followed” by other users. Instagram users own the rights to their original photographs that are posted; Instagram claims no ownership rights in them. Although there are many postings of photographs that users do not own the rights to, there is, nonetheless, a lot of original content. To the extent that the content is not digitally copied from the users account (and digitally pasted somewhere else), there is a clear trace as to who owns the content because it is attached to the users account. However, there is a culture of “regram-ing” whereby content is moved from one user account to another and often onto to other Internet platforms. The lesson here is that the value of registering content such as this, created by users who consider themselves more as “sharers” than “authors” of content, is very small, especially considering the cost. Furthermore, the content is meant to be “shared” not “transferred” in the traditional sense, so recordation is also not likely ever contemplated. Nevertheless, like ccMixer, ownership information is naturally linked to the content since creators are also account holders with information about that holder directly linked to the content. The copyright issues for this type of content pertain to the facility by which people can copy and paste the content elsewhere. This is initially an issue of infringement but turns into an issue of missing ownership information as this content is copied and pasted from platform to platform with no trace of its origin.

These two examples, ccMixer and Instagram, show that online communities foster the creation of content through platforms built for sharing. Creative Commons itself has said that it is difficult to keep track of the trail of content creation and use “web-wide” but that it is more

feasible to do so on a platform-to-platform basis. ccMixer has built tools to allow this kind of web sharing. Perhaps such other platforms as Instagram could make their frameworks for tracking the use of content more robust by requiring digital watermarks for all photographs posted.

Creative Commons and the communities that have been built around the use of their licenses represent more than a group of creators willing to transact with one another. Creative Commons also represents one form of an escape valve for content that would otherwise be trapped by the Copyright System and its automatic protection. One example of this kind of mechanism is a Microsoft Office Add-in that enables users to embed Creative Commons licenses directly into Word, PowerPoint, and Excel documents.¹²⁴ This application serves as a signaling device for sharing as well as a path away from the default mode of registration, recordation, and “life + 70 years.”

C. Literature Review: Private Actors

The idea of using the energy and resources of the private sector has received support from several scholars. Instead of investing the Copyright Office with new responsibilities, these authors see the most efficient way forward as adopting some sort of mechanism that shifts the burden of providing ownership information to the holders of copyright. Ryan Andrews, looking at the (later scuttled) Google Book Search settlement of 2008, argues that the most efficient mechanisms for finding copyright owners are private collective rights organizations (CROs).¹²⁵ As Andrews describes it, these organizations, voluntarily entered into by rightsholders, would license those rightsholders’ works to third parties at standard rates, centralizing and minimizing transaction costs. Andrews points out that “[w]hile rightsholders have less control over the valuation of their works under a CRO than under a property rule regime, the drastic decrease in transaction costs, the expertly tailored valuation, and the shift of the burden of enforcing the right onto the CRO combine to make the CRO a very efficient liability rule regime.”¹²⁶ In stating that such a regime is efficient, Andrews means that the parties best placed to bear the costs of enforcing rights bear them, and parties are easily and cheaply able to find information about works and make deals regarding those works. Andrews points to examples in the music industry like ASCAP and BMI, and he holds up the proposed Book Rights Registry of the Google Book Search settlement as a possible CRO in the literary space. Although Andrews notes that monopoly pricing can be an issue with collective organizations, he argues that lowering of transaction costs outweighs any potential price increase due to monopoly behavior. To encourage the formation of private CROs, Andrews argues that Congress should maintain the current level of protection and remedies, as the high transaction costs that they entail will encourage private actors to form CROs in response. As such, Andrews argues against any reduction in remedies.

Proceeding from a similar initial idea that rightsholders are the most efficient cost avoiders of copyright transactions costs, David Sherman and Dennis Khong come to remarkably different conclusions than Andrews. Sherman argues that the burden of supplying ownership information is more efficiently borne by the owners of copyrighted works, not those who seek to use them.¹²⁷ Given this starting point, Sherman praises the proposed changes under the proposed Orphan Works Act of 2006, such as the limitation of remedies against those who make reasonably diligent efforts to search for the author of an orphan work before using it. This limitation, Sherman argues, would incentivize authors to make their ownership of works known make themselves easy to find and contact, lest they risk losing the value of their works. Sherman

particularly likes the replacement of injunctive relief with a system of “reasonable compensation” to authors whose works are used after a diligent search, as this will allow the continued socially beneficial use of works “without reducing the financial benefit provided to the copyright owner.”¹²⁸ Sherman argues that such a system would reduce transaction costs and allow uses of copyrighted works that would otherwise not have occurred.

In a similar vein, Khong, looking at the British copyright system through an economic lens, argues that if a potential use of an orphan work does not displace any profit that an author would have obtained from the work, that use benefits society at large and should be encouraged.¹²⁹ To this end, Khong argues that the law should be changed to encourage use of works that have been commercially abandoned by their creators and publishers. If a work is no longer available, or its author cannot be found by a diligent search, Khong would have users free to do what they want with the work. To achieve this outcome, Khong proposes that the UK Copyright Tribunal have the authority to determine that a particular work has been abandoned and free use is now permitted, subject to a predetermined royalty rate. Rightsholders who wish to avoid such a fate will have an incentive to make their works available and themselves easy to find, solving the problem of ownership information being unavailable.

D. Literature Review: Extended Collective Licenses

The experience of the Scandinavian countries with Extended Collective Licenses (ECLs) provides an example of how to integrate the resources of private actors with a government body. As explained by Thomas Riis and Jens Schovsbo, as well as Alain Strowel, ECLs cover particular uses of copyrighted works, such as digital reproduction by libraries or broadcasts by national television companies.¹³⁰ Essentially, an ECL provides a compulsory license for particular uses, with royalty rates determined by negotiations between users and rightsholder organizations, and payments to rights holders handled by the rightsholder organization. While some ECLs are listed by statute, Denmark allows the creation of a new ECL to cover works within a “specific field” when users come to an arrangement with a rightsholder organization that represents a sufficient percentage of the rightsholders in that field. The arrangement, which is subject to approval by the Danish government before reaching the status of an ECL, binds all rightsholders, even if they are not members of the organization (although some ECLs do provide opt-out provisions). If so bound, rightsholders still have the right to appeal their particular royalty rate and receive an individualized royalty calculation from the Danish government. Although Denmark is the only country so far to embrace this robust version of ECLs, Sweden has taken steps toward adopting a similar proposal as part of amendments to its Copyright Act.¹³¹

This hybrid of private negotiations and government oversight and enforcement has several advantages, as Riis and Schovsbo argue. The fact that users and rightsholder organizations must first come to their own agreement means that the compulsion inherent in statutory compulsory license schemes (and attendant Berne Convention compliance problems) is lessened. Government approval of the agreement as an ECL provides a further check, helping to ensure the fairness of the ECL. Yet ECLs retain the transaction cost reducing benefits of compulsory licenses, as an individual potential user does not have to find the ownership information for a particular work. Instead they merely follow the procedures of the ECL and submit the predetermined fees. Although the compatibility of ECLs with the Berne Convention’s restrictions on compulsory licenses has not been adjudicated, Riis and Schovsbo, along with Strowel, argue that they probably do comply.

V. FINDINGS: EMERGING INFORMATION MANAGEMENT TOOLS

A. Metadata and Recognition Technology

i. Copyright Office Initiatives

The Copyright Office itself has also looked at potential changes to its operations as part of its attempts to solve the orphan works problem. As part of its 2006 Report on Orphan Works, the Office examined suggestions that it “establish a database of corporate mergers, so ownership of works made for hire can be traced more easily; digitize Copyright Office deposits and place thumbnail images of them on-line; and provide a lineage of ownership for every copyright.”¹³² The Office also considered the possibility that it could “provide guidance to people who want to reduce their rights¹³³ and/or donate works to the public domain, establish a system of unique identifiers for all written and visual works (similar to ISBN numbers), clarify and simplify procedures for registering freelance contributions to periodicals, provide a suggested clause for wills that would allocate rights in copyrights specifically, and send a copy of this clause with every certificate of registration.”¹³⁴ Although the Office looked at these suggestions, it concluded that the Office was unable to solve the orphan works problem without legislative change, and as such the report did not go into any detail on their feasibility or potential effectiveness. Outside of the report, the Office has noted its consideration of other possible changes, most notably a suggestion made in a comment by Google to the Office that its databases of copyright records be made searchable by external, automated means (allowing private sector actors to repurpose and recast the information accumulated by the Office).¹³⁵

ii. Private Image Recognition Technology

Multiple image recognition platforms currently exist. These search platforms are capable of “fingerprinting” an image so that it can determine whether two images are identical or significantly similar. Although other platforms may exist, this paper examines PicScout, TinEye, MatchEngine, PixID, and the PLUS Registry. Statements regarding the functionality of each platform were taken at face value. We did not purchase the software or a membership for any of the platforms, so confirmation of the stated abilities may be required if the Copyright Office wished to interface or implement any or all of the capabilities.

PicScout: PicScout is a for-profit image recognition company that offers services to potential image users, content providers, and platform users. Through its searching capabilities, anyone may search for an image stored on the PicScout platform. According to the website, content providers upload, mail, or submit through the PicScout application programming interface (API) their images onto the PicScout platform.¹³⁶ During this step, content providers may include valuable metadata regarding their image(s) such as licensing information, and image ID, the artist’s name, and the hosting URL. Once an image is within the PicScout Platform, the software can track copies of the image on the Internet and report usage back to the content provider.¹³⁷ This functionality incentivizes users to sign-up for their registry because unauthorized uses of their images will be monitored and reported. PicScout also offers a licensing service that content providers may use to license their images. In total, PicScout currently stores over 140 million images on their website from over 200 content providers. Given the low number of content providers, it is likely that PicScout primarily serves collective societies and not many individual users.

TinEye & PixID: TinEye is a reverse image search engine that can be used to discover “where [an image] came from, how it is being used, if modified versions of the image exist, or to find higher resolution versions.”¹³⁸ The search features are free for non-commercial purposes. Currently, TinEye has indexed over four billion images online. PixID uses the same software and database to perform essentially the same functions.¹³⁹

MatchEngine: MatchEngine is an automated recognition service for use within an application, database, or website.¹⁴⁰ Similar to PicScout, MatchEngine creates a unique fingerprint for every image in a collection. This fingerprint is created without the use of any metadata within the image, however. Thus, even if metadata has been stripped for a benign reason such as increasing website speed or a malignant one—such as eliminating an ownership trail—MatchEngine software can identify an image. It can also identify the image if it has been altered. Alterations may include cropping, shading, and reversing the image. Using the fingerprint, it can detect duplication and modification. These capabilities are useful in detecting fraud and infringement.

PLUS Registry: The PLUS Registry is a non-profit registry funded by individuals and trade associations that uses metadata to provide copyright ownership information based on image searches.¹⁴¹ Members of the PLUS Registry receive a unique ID that is then attached to every uploaded work. To further protect against lost metadata, a Digimarc watermark is embedded within each uploaded image so that ownership metadata can be recovered if stripped. The image searching capabilities are still in beta testing, but they are expected to arrive soon.

These private image recognition platforms demonstrate that it *is* possible to at least start developing an image database that is searchable in a meaningful way. There may be opportunities for the Copyright Office to license available image recognition software or interface with an established platform to provide better registration and recordation services to the public. Most promising is the fingerprinting technology for images. If the Copyright Office were able to implement a system with these capabilities, users would not be required to manually enter information for each image being submitted. As was stated previously, the typical visual artist has hundreds upon thousands of images eligible for registration and recordation at a given moment. If the artist had only to upload those images onto the Copyright Office’s website without entering metadata each time, this would greatly decrease the costs—at least in time—of registration and recordation. Such decrease in cost may correspond to an increase in recordation and registration but further studies are required to demonstrate such a correlation if one exists. Further research may also be necessary to determine the costs of providing such a platform on the scale at which the Copyright Office operates.

iii. Literature Review: Metadata and Recognition

A number of commentators have looked at the problem of categorizing and searching images: photographs, paintings, etc. As these authors point out, images pose a problem that does not exist for textual works: they frequently lack titles, and the image itself cannot be searched for by conventional means. Two approaches have been suggested to combat this problem. Molly Shaffer Van Houweling has suggested that the Office could incorporate (or adopt pre-existing) systems for adding metadata to photographs.¹⁴² The Office could request this metadata (data about the image itself, which could include the author’s name, date and time of the photo, a description, subject keywords, and copyright information) as part of its registration and recordation processes, or it could adopt systems for co-opting metadata created by authors at the

time of the image's creation. As Van Houwelling points out, "[m]any modern digital cameras mark photographs with metadata including date, time, and location, for example."¹⁴³ Although Van Houwelling feels that this sort of data could greatly improve the usability and usefulness of the Office's database of copyrighted works, she does point out that metadata would have to stay attached to a particular photograph, and issues could arise from technological incompatibility between various systems of recording metadata.

Another approach to the image problem involves the use of the emerging field of image recognition technology. Michael Crookston has argued that the Office should use this technology in any databases of copyrighted works that the Office creates to deal with the problem of orphan works.¹⁴⁴ Focusing on image recognition technology, which takes a user-submitted image to find images in the database that are the same or substantially similar, Crookston sees the possibility of matching pictures in the same way that search engines match text queries. Although Crookston acknowledges that the technology holds great promise, it is still in its early stages. Furthermore, the technology could fail to provide useful results when dealing with images of three dimensional sculptural works, where "a user could search using an image from one angle that would not correspond to an image of the same work from an alternate angle that is provided in the registry."¹⁴⁵

B. Legal Mechanisms and Incentives

i. Statutory Incentives

Possible solutions to the problem of unavailability of ownership information could also come from changes to the legal framework of copyright. In addition to changes in the Copyright Office itself, scholars have looked at the place of the recordation and registration functions within the larger copyright system. For these scholars, the inherent problem of lack of ownership information stems from the lack of incentives for rightsholders to provide updated ownership information to the Office (or a third party) in the first place, and they propose several mechanisms for addressing this issue. Looming behind all of these proposals is the shadow of the Berne Convention, with its prohibition on the use of formalities (i.e. a reimposition of the registration requirement for protection), and scholars have come up with various schemes to ensure compliance with Berne. Daniel Gervais and Dashiell Renaud argue that lower level, Berne compliant formalities should be introduced, in order to give authors an incentive to provide ownership information to the Office.¹⁴⁶ They propose a system of formalities, not for authors to enjoy protection, but for the provision of particular remedies. Their proposal envisions a system linked to recordation, rather registration, where owners who fail to record a title transfer for a particular work would lose the right to receive statutory damages or attorneys' fees for infringement of that work. Additionally, failure to record a transfer of title would be considered as part of the *eBay* test for whether an owner can receive injunctive relief. To ensure that the Office has a complete chain of title, Gervais and Dashiell would also require that unregistered works be registered and any prior history of ownership submitted when a transfer of title is recorded with the Office. They further recommend (although without submitting a concrete proposal), some mechanism for penalizing owners who fail to maintain their contact information with the Office.

Jane Ginsburg takes a similar, albeit slightly less expansive, approach.¹⁴⁷ Her proposal focuses on recordation, arguing that the validity of a transfer of copyright should be made contingent on recordation of the transfer with the Office. As Ginsburg points out, United States

law already imposes a writing requirement for valid transfers of ownership, and this requirement does not appear to conflict with the Berne Convention. As with Gervais and Dashiell's proposal, Ginsburg would require the registration of any unregistered works at the same time as recordation, although she would simply make the transfer invalid if this did not occur, rather than limiting remedies. To facilitate this invigorated recordation requirement, Ginsburg recommends that the Office lower its fees for recordation, and she suggests that the requirement itself could be made contingent on the existence of an efficient, user friendly system for recording with the Office. Ginsburg also recommends some system for incorporating title transfers made in wills, divorces, and bankruptcy proceedings, although she does not elaborate on how this might work.

Both of these proposals provide strong incentives for copyright owners to submit information about their transfers of ownership to the Office, without, as the authors argue, running into Berne issues. Although these proposals do not solve all the problems inherent in the lack of availability copyright ownership information (authors who never transfer title would still be potentially difficult to find), they would provide information on a large class of works, which the Office could then make available to the general public.

ii. Restricting Remedies

Most scholars looking at the problem of copyright ownership information have focused on two approaches. Either they try to create ways for the Copyright Office to acquire more information and better present it to the public, or they propose means for encouraging private parties to engage in a similar function. Darrin Henning proposes a third option: instead of focusing on the collection and presentation of ownership information, create a collection of potential user information.¹⁴⁸ Henning envisions a system whereby potential users of a work would first conduct a reasonably diligent search for the owner, and if the owner is not found, list their intended use and their contact information in a public registry. As part of this registration, the potential user would pay "a statutory fee calculated to be the same fee the user and owner would have negotiated among themselves," calculated "on a sliding scale set according to a periodic industry survey" and decreased based on the age of the work.¹⁴⁹ If the rightsholder of the work in question later emerged, they could apply to the registry for the payment of the fees associated with their works, although they would not be entitled to any additional relief, such as injunctive relief or statutory damages. Henning argues that this system would reduce the transaction costs associated with exploiting copyrighted works without unduly prejudicing the rights of copyright owners. In fact, Henning argues that such a system would increase the value of works, as authors who would otherwise no longer be getting any return from their works would be able to realize profits due to the licensing fees. Although Henning acknowledges that the United States' international treaty obligations (primarily the Berne Convention), discourage compulsory licenses of this nature, he argues that this intent to use registry would comply with the convention (as he points out, the Canadian Copyright Board uses a similar system.)

Also looking at the lack of copyright ownership information from a different angle, Stef van Gompel argues that the presence of statutory damages in American copyright law increases the resulting transaction costs.¹⁵⁰ As van Gompel points out, for small scale uses of works whose authors cannot be found, the resulting economic harm from infringement is minimal (as it is not really a lost sale, the user just would not have made the use at all in the face of overly high transaction costs). Accordingly, any actual damages available to the rightsholder would be limited, a fact that van Gompel states means that users of works in Europe often rely on to use

orphan works when they cannot find the owner after a good faith search. However, in the United States, due to the presence of statutory damages that impose a large award even in the absence of actual harm, such an option is not available, leading to a loss of potentially beneficial uses of works. Although van Gompel does not go so far as to call for the abolition of statutory damages, he does suggest that, as part of an intent to use registry similar to that proposed by Henning, statutory damages be limited against users of orphan works who make a good faith effort to find the rightsholder.

VI. OPTIONS AND TRADEOFFS

Although our qualitative analysis points to the effectiveness of certain options in enhancing the flow of ownership information, we do not prioritize those options relative to each other. We encourage the Copyright Office to examine these potential options further according to their relative costs and associated tradeoffs in the context of the needs of the Office and copyright users.

A. Electronic Recording Benefits and Models

Our findings suggest that a system of electronic filing could provide benefits to the Office and the greater copyright marketplace by improving processing speed, enabling a more user-friendly interface, and reducing costs to remitters. The findings illustrate several models available to the Copyright Office, if it chooses to convert its current recordation process to an online, electronic process.

i. The Patent and Trademark Assignment System

The Patent and Trademark Assignment System (“PTAS”), which governs patent and trademark assignments, is administered by the Patent and Trademark Office. The Copyright Office could either duplicate the technology used by the PTO, or explore partnerships with the PTO in which the systems could be incorporated. One of the benefits of adopting such a system is that the technology involved performs a very similar function to the one required by the Copyright Office. Furthermore, the technology already exists and is funded by the U.S. Government. It has proven to be low-cost, making electronic assignments free to users, and efficient, as assignments are recorded within hours of submission.

One of the drawbacks of the PTAS system is that there is no review of assignments, and the PTO does not compare the cover sheet (which populates the searchable catalogue) with the underlying agreement. As a result, discrepant and fraudulent submissions may go undetected. Furthermore, if the Copyright Office were to incorporate the program wholesale, it might limit the Office’s flexibility in adapting the program to its own needs. For example, Copyright Act § 204 requires an assignment to be signed by the owner of the rights conveyed or his agent. Finally, it’s not clear that the PTAS has the infrastructure or flexibility to ensure that the signature requirement is met.

ii. A Modified Guided Remitter Model of Recordation

Another potential model is the Canadian system, which follows a modified guided remitter model of recordation. The system appears to be quick and efficient with only one Copyright Officer needed to process all incoming requests. In addition, this model would not represent a dramatic departure from the Copyright Office’s current recordation system, since it still involves an individualized review by an Office employee of each document recorded.

However, it is not clear how such a system would handle a greater volume of requests, and the fee, while lower than the Copyright Office's current fee, is still relatively high.

iii. Building a New System

The Copyright Office could draw upon its eCO registration platform to build a new system from the ground up. Such a system might look like the guided remitter model proposed in the Copyright Office's Notice of Inquiry issued on January 15, 2014, which does not involve individualized checks on record submissions, but does engage Copyright Office staff in broader, systemic quality control checks on the system. One of the benefits of such a model is the ability to tailor the system to meet the Copyright Office's unique needs. Furthermore, based on the Canadian experience and the Office's own eCO experience, the system appears to reduce recording times and costs. The main drawback is that building a system from the ground up entails more cost in terms of dollars and human resources, especially where staff will be required to engage in targeted quality checks of the system and make systemic changes to eliminate common errors.

B. Copyright Record Searching Models

Our findings also suggest that users could benefit from a more robust tool to search the Copyright Office's records.

i. Westlaw-Like Searchability

Westlaw-like searchability allows records to be searched by multiple fields and includes constrainable terms or dates. Users would be able to toggle easily from record to record, save search history, and flag records they wish to review later. And, for visual works in particular, such as photographs, the system would be able to take a graphical file as an input and determine whether it matches a previously registered work. Currently, several companies offer image recognition tools to such copyright owners as PicScout, TinEye, and (eventually) the PLUS Registry. Implementing some of these image-searching tools within the Copyright Office platform would undoubtedly increase the value of the registration and recordation system. It should be noted, nevertheless, that implementing search capabilities may not necessarily produce increased registrations by graphical artists. If the process of submitting large numbers of photographs or illustrations remains cumbersome, then these types of registrations may remain constant or even stagnate.

ii. Collecting Societies

The Copyright Office may also consider aligning with the search features currently offered by collecting societies. These organizations give users the ability to search by a work's title, author, publisher, performers, and IPI. Providing many options such as these allow users with only partial information to quickly and efficiently find exactly what they need. Additionally, collecting societies enable users to view all recorded information on a given work on the same webpage, and flag records to review later. Like some other options provided in this paper, these abilities are a result of tremendous capital investments in building the platforms, collecting and organizing the information presented on said platforms, and maintaining up-to-date records.

iii. PTO

Searching options for those interacting with the Electronic Patent Assignment System (“EPAS”) of the PTO correspond to the PTO’s model for recordation. In other words, the information required on the Patent Assignment Recordation Coversheet (necessary for on-line recordation) corresponds to the search queries allowed when searching for that information. What can be learned from EPAS is that the feasibility of developing a robust and comprehensive set of search tools and queries likely will depend on the normalization of data entry on the front-end. Furthermore, this normalization and standardization of data entry is bolstered by the fact that each patent for which an assignment is made has a unique patent number, which is akin to the use of other unique identifiers proposed in this paper for identifying works and authors.

All of these proposals however, have costs. In addition to the cost of setting up the technical infrastructure for the search tool, going back into old records and categorizing records with the appropriate metadata to enable more efficient searching will take time and resources. New recordations, on the other hand, will generally allow the Office to input the new information to the record at the time of recordation for a minimal cost (especially if combined with the procedural changes to recordation discussed above). For older records, the Office will have to weigh the costs of making a record searchable by a particular piece of information by the cost of adding that information to old records that do not already have it.

C. Data: Assigning Identifiers and Normalization

Normalization of data entry could be another important step toward enhancing ownership of information.

i. Authors

Currently, the Office does not categorize authors by anything other than the name as entered on the registration form. The Office also lacks the software capabilities to connect different forms of the same author's name. For example, an author might file registrations as “Jon Smith,” “Jonathan Smith,” “Jonathan R. Smith,” or maybe even “J.R. Smith” but the Office’s database currently cannot connect these different variations. Put differently, if a user searched the Office’s database for “Jon Smith,” the user would come up with lots of hits, some of which might be related to other forms of the same individual’s name, some might not be. This issue would be addressed by accounting for search-term and connectors, which is a direct software fix, but proper categorization of authors and works by unique identifiers should also be in place to ensure that every iteration of a name does not appear disaggregated.

The Office may also consider adopting the methods used by the International Standard Name Identifier (ISNI) initiative and integrating them into its own processing platform. Collecting societies have adopted this system of uniform number coding, which is overseen by CISAC, to link works with their rights owners, and rights owners to their collecting society affiliation. Joining this system would allow the Office to link with other systems—such as such as ASCAP, BMI, and SESAC—and would be a fundamental shift in the role of the Office in the copyright marketplace.

ii. Works

The Office's current registration platform, eCO, assigns each work a Service Request number (also known as a Case Number) to each copyright claim. Those copyright claims that are

ultimately registered receive a registration number, which then becomes the primary identifier for the work. Thus, in essence, registered works have two numbers: the SR number and the registration number. Those copyright claims that are abandoned—typically because the remitter does not respond to the Office’s request(s) for additional information—or are rejected, do not receive registration numbers, but can still be identified by SR number. In short, one can think of the SR number as an internal identifier used primarily for processing, and the registration number as the "number of record" for issued registrations.

Moreover, for document recordation, the Office is still on a legacy system that does not use SR numbers, but rather, an in-processing number, which serves essentially the same function as an SR number does for the newer system. Once documents are recorded, they are assigned to a particular "volume" and each page of the document is given a page number within that volume which serves as the number of record for recorded documents.

The Office’s system could catalogue rights owners and creative works by unique identifiers that allow for consistency in categorization and easier tracking. This sort of change linked to a short-form recordation process would enable private parties to quickly notify the Office of transactions at reduced costs.

The need for unique identifiers is especially evident for visual works. As was stated before, the most common (and effective) way to identify a work within the Copyright Office is through title information. This is problematic for visual works. As an example, most people can conjure in their mind the image of a WWII veteran kissing a nurse in the middle of Times Square, but the title is not commonly known. If the Copyright Office were to lead the way in identifying images—and all other works—by unique identifiers such as the system offered by the International Standard Name Identifier (ISNI) initiative, such a search may be as simple as locating an ISBN number to find a book. However, as mentioned before, photographers and illustrators create vast numbers of original works within any given year. To require these photographers or illustrators to manually encode each image with a unique identifier may be unduly burdensome. One possible way to overcome this burden would be to implement an application programming interface (API) that could embed the necessary ownership information into a given photo or illustration being edited using imaging software. If this interface also allowed photographers to quickly upload their photographs to a portfolio with the Copyright Office with a simple click, this may also decrease the burden and increase registration of images. According to the owner of an online and printed directory in which visual artists display samples of their work, the costs of implementing a website capable of handling one million images and associated metadata cost over three million dollars.¹⁵¹ The system envisioned in this section would need orders of magnitude more capacity and, with that, perhaps costs may escalate. That said, technology continues to advance and bring down the costs of implementing and maintaining a website. Additionally, the costs of *not* having a robust registry for graphical works must also be considered. Further research would be required to weigh the costs and benefits of implementing such as system.

D. Legal Tools: Standard Transfer Documents

The normalization of data entry could be supported by the standardization of the documents submitted for recordation. Currently, the majority of documents submitted to the Copyright Office for recordation are “short form” agreements that only give the information pertinent to what is required for the public record. This means that regardless of the nature of the

larger and more complicated agreements, within which transfers are being made, there is room for standardization of the smaller provisions of those contracts that transfer or license particular rights in copyrighted works. Further research would be required to determine exactly what form these standard, “short form” agreements would take, however, their utility can be assessed in light of the previous discussions about Creative Commons and the Patent and Trademark Office. Creative Commons provides standard licenses created to suit particular needs of both owners and potential licensees. Without having to draft these licenses for themselves or pay for a lawyer to do so, owners of copyrighted works can quickly use those supplied to them by Creative Commons. Furthermore, the Patent and Trademark Office’s Patent Assignment Recordation Coversheet normalizes and standardizes the information needed for entry into the public record, thereby enhancing the speed and lowering the cost of that data entry. Taken together, these findings point to the potential of standardized legal instruments to facilitate the documentation of licenses and transfers, as well as, the entry of the necessary information into the public record. The standardization of legal documents, as opposed to just the use of coversheets as with the PTO, could also satisfy the signature requirement for valid transfers of ownership.

E. Copyright Ownership Searching

i. Copyright Hub

Britain’s Copyright Hub is a privately operated site which directs users to other websites based on the type of information that the user seeks (i.e., users searching for information about the ownership of a song will be directed to PRS or PPL, musical license collecting societies). The Copyright Office could adapt aspects of the Copyright Hub’s web operations to its own web offerings. It might also partner with private companies to create such a site or engineer its own similar site.

Any of these options would allow the Copyright Office to promote information sharing among organizations without having to connect actual records, which may pose cost and security concerns. Furthermore, incorporating some ideas from the Copyright Hub into the Office’s current web offerings could help the Copyright Office make clear to users where gaps in its records lie, and where users can go to obtain more information.

With careful attention to its responsibilities to users, partnering with private companies could help make records access and/or integration across ownership domains more robust. By partnering with selected private companies, the Copyright Office could share the responsibility to set up and maintain a clearinghouse site similar to the Copyright Hub, while still maintaining control over which organizations it represents on the site and how. In this way, the Copyright Office could potentially promote—or not—certain websites or organizations through careful planning of how it describes or links those organizations.

One of the drawbacks of such a system is that it does not allow users to trace a particular work, using its registration information or other identifying number, from the United Kingdom Government’s records to alternate databases (i.e., information about obtaining a license to use Adele’s “Rolling in the Deep”). Furthermore, such a site might not offer a marginal benefit over Google Search or other generic search engines to justify the cost of maintaining it. With emerging sites like Plus Registry, which is currently beta testing methods of using image recognition to catalogue photographic works, the site will need to be continually updated and maintained. And because the Copyright Office does not currently engage in any similar web

offerings, it may not have the institutional knowledge or capacity to launch and maintain such a site.

Finally, there is a threshold question of the extent to which the Copyright Office should ally itself, or be perceived as allying itself, with the activities of private sector organizations.

ii. Real Property System

The RPS has adopted electronic filing in many counties, which has helped to streamline private title companies' abilities to work with county recorders' offices, in turn lowering the cost of business and passing benefits on to end users. Private title companies and county recorders' offices work closely together to ensure completeness of records. Subject to the political considerations noted, collecting societies and other big market players could be seen as the copyright analog to private title companies, and the Copyright Office may consider engaging with these entities more closely to achieve some of the same results found in the RPS. For example, linking systems could allow the Copyright Office to automatically receive copyright assignment and transfer records. Other partnerships could be contemplated that enable the Office to receive updated copyright ownership information on a regular basis. These options would require protracted negotiations with copyright societies and other big market players, and could possibly never be actualized.

VII. FURTHER RESEARCH

A. A Proactive Advisory Board

Answers to two central questions continue to elude even the most rigorous and comprehensive inquiries into contemporary practices affecting the collection, maintenance and dissemination of copyright ownership information in the United States: (1) whether, apart from reducing the costs of collection and use, currently contemplated efficiency measures will increase the quantity of information that is collected and used; and, (2) precisely what mix of public rules and private ordering, along with Copyright Office initiatives and private sector actions, is likely to increase both the efficiency and use of copyright ownership information.

Copyright Office initiatives have so far dominated the landscape of inquiry into the problems presented by copyright ownership information in the US, from the sweeping investigation of the orphan works problem beginning in ___ and since renewed; current inquiries into ____, ____; and ongoing, less formal conversations with stakeholders. These activities reflect not only the important role that the Copyright Office traditionally occupies in the formulation of US copyright policy generally, but also its unique responsibilities for collecting, and providing access to, copyright ownership information in connection with the registration of claims to copyright and recordation of copyright transfers.

The extraordinary contributions that still emerging information technologies can undoubtedly offer to the resolution of the problems considered in this white paper, when taken together with the still unanswered empirical questions about what it will take to increase the use, as well as the efficiency, of information collection and dissemination, indicate that it would be timely for private sector institutions with an immediate stake in the resolution of these issues—either as producers or users of these new technologies—to be encouraged to step forward and collaborate in the resolution of these problems. Although past deliberations of stakeholders under such umbrellas as CONTU, the OTA Advisory Panel on Intellectual Property Rights in an Age

of Electronics and Information, and ACCORD, indicate possible directions for such collaborations, the specific private sector focus, and pragmatic, solution-based efforts in the United Kingdom, described in the 2012 report, *Copyright Works*, may in our judgment offer a more effective direction for such collaboration, particularly if taken through an alliance with the Copyright Office.

B. Outside Contracting of Recordation Functions

The Copyright Office has not specifically encouraged third-party sources, such as collecting societies, to submit registrations or record copyright transfers on behalf of their members. The Office has had some preliminary discussions with various market participants about creating more streamlined interfaces that would allow third-party systems to tie into its system, which would potentially enable other registries to secure registrations or to record documents, using their own systems as the gateway. Such technologies could be incorporated into the Office's system as part of a larger overhaul of its online platform.

The Office also has not had any discussions regarding certifying third-party sources to serve as official registries of copyright ownership information. Accordingly, the Office has never seriously considered transitioning away from being the sole official registry for copyrighted works and towards certifying the operation of registries operated by third parties, nor has it considered the possibility of acting as an overseer of collective licenses developed by third parties. Such a transition would be a large paradigm shift of the role of the Office in the copyright marketplace.

Additionally, very old works still receiving protection under copyright need to be added to the Office's digital system. Given the massive nature of this undertaking, it may be desirable to partner with corporations already interested in this sort of project, such as Google or Yahoo.

These outside contracting considerations, however, do not come without potentially significant costs. For one, exporting a traditional Office function to a private party (or parties) may trigger support or opposition based on ideological notions of the role of government, rather than a close analysis of the specific situation. Thus, a tremendous amount of monetary and political capital may need to be expended to secure any of these proposals, and it is currently unclear whether such a large monetary and political investment should be placed in such a potentially fraught area.

It is also currently unclear whether private parties would participate in outside contracting proposals if the cost of doing so meant giving much of their proprietary information to the public for free or at a low cost. Private collecting societies, for example, have invested significant time and resources to create their data-systems, and we are currently not in a position to ascertain the amount of remuneration private parties would need to participate. While these proposals should benefit private actors by providing for more complete ownership information, which would invariably facilitate some transactions that otherwise would not occur, it seems unlikely that this benefit alone will suffice for private party participation. Furthermore, if the costs of remuneration were passed on to the public in the form of user fees, it would also discourage use of the system and frustrate its primary goals.

Private parties may also have concerns about the privacy of personally identifiable information in their databases, and they may be unwilling to share certain types of information. We currently do not know to what extent private databases contain records that raise potential

privacy issues, so any negotiation with outside parties would have to take these potential concerns into account.

Government regulation of outside contracting might mitigate some of these concerns. The RPS, for example, is highly regulated through recording statutes and other affirmative requirements placed on private parties. It is important to note, however, that government regulation brings with it a new set of challenges while sometimes failing to completely ameliorate the targeted underlying issues. For example, fears of mission drift caused by special interests and anti-government ideologues can lead to more political battles. Moreover, some or all of these outside contracting proposals would require the government to put out requests for proposals and other competitive bidding arraignments that may also come with a degree of stress and disagreement.

Lastly, while our research on collecting societies and the RPS has provided a sense of the ownership information in the possession of certain private parties, we currently do not know if and to what extent other relevant private parties – such as Google or Yahoo! – have ownership information compiled and maintained in a productive fashion.

C. The Impact of a Digital Recordation System on Actual Recordations

As has been stated previously, it may be necessary to research what impact implementing a robust recordation system would have on actual recordations. Although some users may choose not to record with the Copyright Office because they feel the process is unduly burdensome, expensive, or arduous, other users have different reasons for not recording their works. If a collecting society offers to a copyright owner everything that the Copyright Office offers and more, then users may not record regardless of whether the recordation process is improved. This is just one example among many reasons why improving a recordation system may not actually increase the number of recordations filed with the Copyright Office. Implicit within such a study is determining what the costs of *not* implementing a robust recordation system are. Before investing significant funds in developing a system, this type of study may be prudent.

In addition to studying the impact of an improved recordation system on the number of filed recordations, the Copyright Office may want to consider any additional benefits beyond improved access to ownership information. It may be the case, as one stakeholder suggested, that enhanced record export technology could help form new markets and reduce barriers to entry.¹⁵² For example, research institutions may be better equipped to construct archives of potential orphan works if they were able to quickly and efficiently export the Copyright Office's registration and recordation information for many authors at once. Another example is being able to study copyright trends and convert this into valuable market research. These economic incentives may help justify the costs of implementing a robust, digital recordation system even if the increase in recordations alone would not justify the expense.

Finally, the Copyright Office may want to consider the costs of success so as to better prepare in the event recordations increase exponentially. In such a case, some individuals may be more inclined to commit fraud in the submission of recordation or registration forms with the Copyright Office. Under the current law, copyright registration is required for an infringement suit. However, absent proof of intent to defraud the Copyright Office, "inaccuracies" in the registration do not bar the right to sue.¹⁵³ A WestlawNext search for cases in which copyright recordation fraud was alleged did not yield any results. However, there is reason to believe such fraud may be covered under existing state statutes. For example, the Fourth Circuit found a

fraudulent transfer of a patent punishable under a Virginia “slander of title” tort.¹⁵⁴ Additionally, if the recordation was made using the mail or wires—which an online recordation *would*—fraudulent recordation would undoubtedly fall under the mail and wire fraud statutes. Although legal remedies may already exist to combat fraud, further research into copyright-centered mechanisms to manage fraud may be prudent. This is especially true if legal incentives are implemented that give more weight to recording with the Copyright Office.

D. Adoption of Metadata Standards for Images

The Copyright Office could explore the potential costs and benefits of adopting metadata standards for recorded and registered photographs. There is potential for the Copyright Office to set industry standards regarding photographs for, according to interviewed stakeholders, visual artists use a vast array of metadata standards in their work. Some use none at all. When researching this topic, the Copyright Office may want to consider whether adopting a “set” standard is realistic in light of ever-improving graphics technology. Also, the Copyright Office may want to consider the consequences of adopting metadata standards that would consider metadata conforming to such standards as digital copyright management information. One potential consequence of universally applying such a standard may be to forbid search engines and other websites or programs from stripping the information to increase efficiency even though the website or program has no intention of actually using the image. This is just one of many potential issues. Further research and input from industry stakeholders could help to better understand the consequences of implementing such standards.

E. Conditioning Validity or Availability of Relief on Recordation

The Copyright Office could explore the option of conditioning the validity of a transfer, or the availability of statutory damages and injunctive relief relating to transferred works, on recordation. Among other benefits, this option places the burden of recordation on owners that are most likely to have comprehensive information about those works. It is also a low-cost option, at least in terms of the Office’s expenditures. The main issue is that owners would be strongly opposed to any option that would limit or condition their potential remedies. Owners will also face increased costs due to the need to record, especially in high transaction industries. Even owners who do not take issue with the increased cost may simply forget to record their transfers, resulting in the invalidity of some economically beneficial transfers. Still, these issues may ultimately be outweighed by the possibility of a more comprehensive chain of title database. Yet, this option would require statutory change, and therefore significant expenditure of political capital to realize, particularly given the likely opposition from owners.

F. An Intent to Use Database

Finally, an intent to use database could be created by the Copyright Office to limit remedies against those who make good faith searches for owners. This would allow for the use of otherwise economically valueless or abandoned works. Further, it again places the burden on owners, who are best situated to provide necessary information. Such a system could be quite expensive to create and maintain, though, as well as technologically challenging to implement. Owners will also be opposed to it because it could reduce potential remedies. Finally, it creates opportunities for bad faith actors to use works if they can claim they conducted a search without really searching. As a result, some mechanism to ensure good faith searches would be required, further adding to the cost. As with making recordation a condition of transfer, this option would

require statutory change, and therefore significant expenditure of political capital to make happen.

VIII. A NOTE ON BERNE

Looming over these options is the specter of the Berne Convention for the Protection of Literary and Artistic Works (Paris Act 1971), to which the United States adhered in 1989. In order to maintain the United States' obligations as a party to the Paris Text, any changes to the copyright system must comply with the treaty's requirements.

For purposes of the proposals in this paper, the minimum requirements most relevant are the minimum term of protection, the ban on formalities as a condition to protection, and the general bar on compulsory licenses. Berne Convention members must offer qualifying foreign works a copyright term of at least the life of the author plus 50 years. This term cannot be subject to any renewal requirements or other restrictions. Further, this term of protection accrues to the author automatically upon creation of the work; no formalities (such as registration) may be imposed to obtain or maintain protection during the mandated minimum term. Additionally, Berne generally prohibits compulsory license schemes for copyrighted works.

Two important qualifications limit these general requirements. First, Berne's requirements apply only to copyrights granted to qualifying foreign works. Member nations may impose whatever formalities and reduced levels of protection and duration they wish on domestic works.¹⁵⁵ Second, Berne does allow limited compulsory licensing schemes for the reproduction of works, as long as the scheme is confined to "certain special cases . . . does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author" (the "three step test").¹⁵⁶

To the extent that any of the options presented in this paper are perceived to impose formal requirements on foreign works to acquire or maintain copyright protection, they may be thought to conflict with the Berne Convention. Such proposals could of course be restricted solely to U.S. works, although this could trigger opposition from U.S. authors and the U.S. content industry generally. The viability of other options under Berne is less clear, and further research into their compatibility with the treaty is required. Compulsory licensing schemes analogous to the Scandinavian Extended Compulsory Licenses or an "intent to use" registry could potentially pass muster under the Convention's three step test. Berne does not impose any restrictions on requirements for transfer of ownership, so proposals for reinstating recordation as a requirement for a valid transfer may also comply. Berne also does not require the availability of statutory damages or attorney's fees, and proposals based on limited these remedies in certain cases could meet the treaty's standards, although U.S. obligations under the WTO TRIPs agreement's provisions on remedies should always be considered. However, even with this likelihood of compliance, all proposals should receive a careful look to ensure their compatibility with the Berne Convention's various provisions.

IX. CONCLUSION

This report has investigated methods for improving public access to copyright ownership information. When such information is easily obtainable, potential buyers or licensees can generally make more well-informed transactions, which in turn may enhance the market for copyright. The Copyright Office has begun to take steps towards improving its own copyright information management systems. It is the goal of this report to facilitate that endeavor. Some of

the options investigated include electronic recordation, advanced searchability, and data normalization. This report also indicates areas that may warrant further research, including a proactive advisory board, the outside contracting of recordation functions, the adoption of metadata standards, and an intent to use database. As the Copyright Office navigates the digital age, it has the opportunity to consider options that could innovate and improve the collection, organization, and distribution of copyright information, and further promote the production of new creative works and the technologies that support them.

Endnotes

- ¹ U.S. COPYRIGHT OFFICE, *Strategic Plan 2004-2008* 1 (2004) [hereinafter U.S. COPYRIGHT OFFICE STRATEGIC PLAN], available at <http://www.copyright.gov/reports/strategic2004-2008.pdf>.
- ² See U.S. COPYRIGHT OFFICE, *Report on Orphan Works* (Jan. 2006), available at www.copyright.gov/orphan.
- ³ U.S. COPYRIGHT OFFICE, *Priorities and Special Projects of the United States Copyright Office 2011-2013* 3 (Oct. 25, 2011) [hereinafter U.S. COPYRIGHT OFFICE *Priorities*], available at www.copyright.gov/docs/priorities.pdf.
- ⁴ See Notice of Inquiry: Strategic Plan for Recordation of Documents, 79 Fed. Reg. 2696, 2697 (Jan. 15, 2014).
- ⁵ U.S. COPYRIGHT OFFICE, *Annual Report of the Register of Copyrights: Fiscal 2011 Annual Report* 24 (Sept. 2011), available at <http://www.copyright.gov/reports/annual/2011/ar2011.pdf>.
- ⁶ U.S. COPYRIGHT OFFICE *Priorities*, *supra* note 3.
- ⁷ U.S. COPYRIGHT OFFICE *Priorities*, *supra* note 3, at 15.
- ⁸ *Fiscal 2014 Budget Requests: Hearing before the Senate Committee on Appropriations*, 113th Cong. (May 7, 2013) (Statement of Maria A. Pallante, Register of Copyrights), available at <http://www.appropriations.senate.gov/ht-legislative.cfm?method=hearings.download&id=e7c4eb81-7ff7-4a13-862a-9ac5ca097ea0>.
- ⁹ Notice of Inquiry: Technological Upgrades to Registration and Recordation Functions, No. 2013-2, 78 Fed. Reg. 17722 (Mar. 22, 2013); Notice of Inquiry: Strategic Plan for Recordation of Documents, *supra* note 9.
- ¹⁰ *U.S. Copyright Office Announces Ringer Fellowships and Kaminstein Scholars, Names Brauneis of The George Washington University*, COPYRIGHT NEWSNET (Sept. 5, 2013), <http://www.copyright.gov/newsnet/2013/516.html> (announcing Professor Robert Brauneis of The George Washington University as the first Kaminstein Scholar).
- ¹¹ See U.S. COPYRIGHT OFFICE, *Advisory Committee on Copyright Registration and Deposit (ACCORD) Report of the Co-Chairs* (Sept. 1993), available at <http://www.copyright.gov/1201/accord>.
- ¹² PAUL GOLDSTEIN, 3 GOLDSTEIN ON COPYRIGHT § 5.2.3 (3d ed. 2014).
- ¹³ Conference Call Interview with Jacqueline Charlesworth, Zarifa Madyun, and Christopher Reed on November 13, 2013 at 10:00 AM PST (notes on file with authors).
- ¹⁴ *Id.*
- ¹⁵ For the purposes of the following discussion, this paper refers to the collection of documents submitted for purposes of recordation as the “submission,” and those who send the submissions as the “remitters.”
- ¹⁶ Circular 12 and the cover sheet can be downloaded from the Office website at <http://www.copyright.gov/document.html>.
- ¹⁷ U.S. COPYRIGHT OFFICE, *Calculating Fees for Recording Documents at the Copyright Office*, available at <http://www.copyright.gov/fls/sl4d.pdf>.
- ¹⁸ Technical Amendments Act, Pub. L. No. 105-80, § 708(b)(1), 111 Stat. 1529 (1997).
- ¹⁹ *Id.* § 708(b)(2).
- ²⁰ *Id.* § 708(b)(4).
- ²¹ *Id.* § 708(b)(5).
- ²² U.S. COPYRIGHT OFFICE, *Analysis and Proposed Copyright Fee Adjustments to Go into Effect on or about August 1, 2009, Submitted to Congress by Marybeth Peters, Register of Copyrights* (March 15, 2009) [hereinafter U.S. COPYRIGHT OFFICE *Cost Study*], available at <http://www.copyright.gov/reports/fees2009.pdf>.
- ²³ U.S. COPYRIGHT OFFICE *Cost Study*, *supra* note 22, at 9.
- ²⁴ U.S. COPYRIGHT OFFICE *Cost Study*, *supra* note 22, at 8.
- ²⁵ U.S. COPYRIGHT OFFICE *Cost Study*, *supra* note 22, at 5.
- ²⁶ U.S. COPYRIGHT OFFICE *Cost Study*, *supra* note 22, at 5.

-
- ²⁷ U.S. COPYRIGHT OFFICE *Cost Study*, *supra* note 22, at 5.
- ²⁸ U.S. COPYRIGHT OFFICE *Cost Study*, *supra* note 22, at 11.
- ²⁹ Summary of Business Process Reengineering of the Recordation Service Stakeholder Meetings (notes on file with Jacqueline Charlesworth, General Counsel and Associate Register of Copyrights).
- ³⁰ Business Process Reengineering of the Recordation Service Stakeholder Meeting #2 (July 26, 2012) (notes on file with Jacqueline Charlesworth, General Counsel and Associate Register of Copyrights).
- ³¹ *Id.*
- ³² *Id.*
- ³³ See *Report on Orphan Works*, *supra* note 2, at 2, 21.
- ³⁴ *Id.* at 2, 21.
- ³⁵ Notice of Inquiry: Strategic Plan for Recordation of Documents, 79 Fed. Reg. 2697 (Jan. 15, 2014).
- ³⁶ Assessment of the Orphans Works Issue and Costs for Rights Clearance, at 26, European Commission DG Information Society and Media (May 2010) (Anna Vuopala).
- ³⁷ *Id.* at 18.
- ³⁸ *Id.* at 5.
- ³⁹ Telephone interview with Eugene Mopsik, Executive Director, and Victor Perlamn, General Counsel, American Society of Media Photographers (Feb. 12, 2014).
- ⁴⁰ See 37 C.F.R. § 202.3(10) (2013).
- ⁴¹ U.S. COPYRIGHT OFFICE, FL-107, COPYRIGHT REGISTRATION OF PHOTOGRAPHS (2012), *available at* <http://www.copyright.gov/fls/fl107.html>.
- ⁴² *Cf.* 37 C.F.R. § 202.3 (2013) (group registration options are not extended to other visual artists besides photographers).
- ⁴³ Telephone interview with Cynthia Turner & Brad Holland, Co-Chairs, American Society of Illustrators Partnership (Feb. 20, 2014); telephone interview with Nancy E. Wolff, Counsel for Picture Archive Counsel of America, Inc. (Feb. 17, 2014).
- ⁴⁴ *Id.*
- ⁴⁵ *Id.*
- ⁴⁶ *Id.*
- ⁴⁷ *Authors Guild, Inc. v. Google, Inc.*, 954 F. Supp. 2d 282, 284 (S.D.N.Y. 2013).
- ⁴⁸ *Id.* at 293.
- ⁴⁹ Directive 2012/28, of the European Parliament and of the Council of 25 October 2012 on Certain Permitted Uses of Orphan Works, 2012 O.J. (L 299) 5, 14. EU directives (as distinguished from EU regulations) have no force as positive law; they are directions to member states to adopt legislation. It is the subsequent legislation that carries the force of law.
- ⁵⁰ *Id.* at 14.
- ⁵¹ *Id.* at 11.
- ⁵² *Id.* at 10.
- ⁵³ *Id.* at 18.
- ⁵⁴ *Id.* 19.
- ⁵⁵ Jeremy De Beer & Mario Bouchard, *Canada's 'Orphan Works' Regime: Unlocatable Owners and the Copyright Board*, 10 OXFORD U. COMMONWEALTH L.J. 215, 219 (2010).
- ⁵⁶ *Id.* at 242.
- ⁵⁷ *Id.* at 243.
- ⁵⁸ *Id.* at 249.
- ⁵⁹ *Id.* at 251.
- ⁶⁰ Aniko Gyenge, Head of Consumer Protection, Copyright and Industrial Property Unit at the Ministry of Justice and Law Enforcement in the European Law Department, *The Hungarian Model of Licensing Orphan Works* 5 (March 14, 2010).
- ⁶¹ *Id.* at 7.

⁶² *Id.*

⁶³ Joshua O. Mausner, *Copyright Orphan Works: A Multi-Pronged Solution to Solve A Harmful Market Inefficiency*, 55 J. COPYRIGHT SOC'Y U.S.A. 517, 543-44 (2008)

⁶⁴ Megan L. Bibb, *Applying Old Theories to New Problems: How Adverse Possession Can Help Solve the Orphan Works Crisis*, 12 VAND. J. ENT. & TECH. L. 149, 180 (2009)

⁶⁵ Genevieve P. Rosloff, "Some Rights Reserved": *Finding the Space Between All Rights Reserved and the Public Domain*, 33 COLUM. J.L. & ARTS 37 (2009)

⁶⁶ Rosloff at 80.

⁶⁷ See e.g., Del. Code tit. 25, § 153 ("A deed concerning lands or tenements shall have priority from the time that it is recorded in the proper office without respect to the time that it was signed, sealed and delivered.").

⁶⁸ See e.g., Iowa Code § 558.41 ("An instrument affecting real estate is of no validity against subsequent purchasers for a valuable consideration, without notice. . . .")

⁶⁹ See e.g., Rev. Code Wash. § 65.08.070 ("A conveyance of real property . . . may be recorded in the office of the recording officer of the county where the property is situated. Every such conveyance not so recorded is void as against any subsequent purchaser or mortgagee in good faith and for a valuable consideration from the same vendor, his or her heirs or devisees, of the same real property or any portion thereof whose conveyance is first duly recorded.").

⁷⁰ See 20 Ohio Jur. 3d Counties, Etc. § 170.

⁷¹ Spencer Hale, *Real Property E-Conveyances and E-Recordings: The Solution or Cause of Mortgage Fraud?*, 5 Okla. J. L. & Tech. 44 (2009).

⁷² PROPERTY RECORDS INDUSTRY ASSOCIATION, <http://www.pria.us> (last visited XXX).

⁷³ Recorder's offices only check to make sure all ministerial prerequisites have been satisfied. For example, many jurisdictions require that the recorder refuse to record any conveyance presented to him or her, unless it bears the stamp of the county auditor stating the conveyance has been examined and the grantor has complied with the statutory provisions for payment of a conveyance fee. E.g., Ohio R.C. § 317.22.

⁷⁴ Spencer Hale, *Real Property E-Conveyances and E-Recordings: The Solution or Cause of Mortgage Fraud?*, 5 Okla. J. L. & Tech. 44 (2009); David W. Moore, *Serving Today's E-Consumers*, TITLE NEWS, July/Aug. 2006, available at http://www.alta.org/publications/titlenews/06/04_04.cfm.

⁷⁵ USPTO.gov, *Change Ownership*, <http://www.uspto.gov/patents/process/changeownership.jsp>.

⁷⁶ USPTO.gov, *Frequently Asked Questions about Assignments*, <http://www.uspto.gov/faq/assignments.jsp>.

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ *Id.*

⁸⁶ *Id.*

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² USPTO.gov, *Electronic Patent Assignment System*, <http://epas.uspto.gov>

-
- ⁹³ *Id.*
- ⁹⁴ USPTO.gov, *Patent Assignment Query Menu*, <http://assignments.uspto.gov/assignments/?db=pat>.
- ⁹⁵ USPTO.gov, *Frequently Asked Questions about Assignments*, <http://www.uspto.gov/faq/assignments.jsp>.
- ⁹⁶ USPTO.gov, *United States Patent and Trademark Office Fee Schedule*, <http://www.uspto.gov/web/offices/ac/qs/ope/fee010114.htm>
- ⁹⁷ *Id.*
- ⁹⁸ PAUL GOLDSTEIN, *INTERNATIONAL COPYRIGHT: PRINCIPLES, LAW AND PRACTICE* § 5.2 (2001).
- ⁹⁹ United Kingdom, *Copyright, Designs and Patents Act 1988* § 903(3).
- ¹⁰⁰ *See Transfer a registration guidance*, UK COPYRIGHT SERVICE, *available at* https://secure.copyrightservice.co.uk/account/transfer_reg.
- ¹⁰¹ *Id.*
- ¹⁰² *See* Copyright Hub, *Members* (last visited Feb. 22, 2014), <http://www.copyrighthub.co.uk/about/chlg/members>.
- ¹⁰³ *See* Richard Hooper & Dr. Ros Lynch, *Copyright Works: Streamlining Copyright Licensing for the Digital Age*, INTELLECTUAL PROP. OFF. (July 2012), *available at* <http://www.ipo.gov.uk/hargreaves-copyright-dce>.
- ¹⁰⁴ Copyright Hub, *Welcome to the Copyright Hub* (last visited Feb. 22, 2014), <http://www.copyrighthub.co.uk>.
- ¹⁰⁵ *Id.* at http://www.copyrighthub.co.uk/get-permission/music#_.
- ¹⁰⁶ Olivia Solon, *Copyright Hub pilot launches in the UK*, WIRED.CO.UK (Jul. 10, 2013), <http://www.wired.co.uk/news/archive/2013-07/10/copyright-hub-pilot>.
- ¹⁰⁷ *Id.*
- ¹⁰⁸ *Id.*
- ¹⁰⁹ Canada Copyright Act § 12(4).
- ¹¹⁰ Canada Copyright Act § 13(4).
- ¹¹¹ Telephone interview with Jocelyn Bedard, Copyright Officer of Canada (Nov. 26, 2013).
- ¹¹² *See* CANADIAN INTELLECTUAL PROPERTY OFFICE, *Filing a grant of interest*, <http://www.cipo.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/wr00039.html>.
- ¹¹³ Telephone interview with Jocelyn Bedard, Copyright Officer of Canada (Nov. 26, 2013).
- ¹¹⁴ *See* CANADIAN INTELLECTUAL PROPERTY OFFICE, *How your application for registration of a copyright is processed*, <http://www.cipo.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/wr00039.html>.
- ¹¹⁵ Telephone interview with Jocelyn Bedard, Copyright Officer of Canada (Nov. 26, 2013).
- ¹¹⁶ *Id.*
- ¹¹⁷ ASCAP, *About ASCAP* (last visited Mar. 8, 2014), <http://www.ascap.com/about/>; Telephone interview with DeDe Burns, ASCAP (Dec. 10, 2013).
- ¹¹⁸ *Id.*
- ¹¹⁹ Telephone interview with Fred Harber, Copyright Clearance Center (Dec. 1, 2013).
- ¹²⁰ ASCAP, *ASCAP Articles of Association*, *available at* [https://www.ascap.com/~media/files/pdf/members/governing-documents/articles.pdf](https://www.ascap.com/~/media/files/pdf/members/governing-documents/articles.pdf)
- ¹²¹ Telephone interview with Fred Harber, Copyright Clearance Center (Dec. 1, 2013).
- ¹²² Creative Commons, *About*, <http://creativecommons.org/about>.
- ¹²³ ccMixer, *Welcome to ccMixer*, <http://ccmixter.org>.
- ¹²⁴ Microsoft Download Center, *Creative Commons Add-in for Microsoft Word*, <http://www.microsoft.com/en-us/download/details.aspx?id=13303>.
- ¹²⁵ Ryan Andrews, *Contracting Out of the Orphan Works Problem: How the Google Book Search Settlement Serves As A Private Solution to the Orphan Works Problem and Why It Should Matter to Policy Makers*, 19 S. CAL. INTERDISC. L.J. 97 (2009)
- ¹²⁶ Andrews at 106.

¹²⁷ David B. Sherman, *Cost and Resource Allocation Under the Orphan Works Act of 2006: Would the Act Reduce Transaction Costs, Allocate Orphan Works Efficiently, and Serve the Goals of Copyright Law?*, 12 VA. J.L. & TECH. 4 (2007)

¹²⁸ Sherman at 58.

¹²⁹ Dennis W.K. Khong, *Orphan Works, Abandonware and the Missing Market for Copyrighted Goods*, 15 INT'L J.L. & INFO. TECH. 54 (2007)

¹³⁰ Thomas Riis & Jens Schovsbo, *Extended Collective Licenses and the Nordic Experience: It's A Hybrid but Is It A Volvo or A Lemon?*, 33 COLUM. J.L. & ARTS 471 (2010); Alain Strowel, *The European "Extended Collective Licensing" Model*, 34 COLUM. J.L. & ARTS 665 (2011)

¹³¹ Jan Rosen, *Copyright Contracts – EU Solutions or National Concern? A Swedish Proposal to Amend the Copyright Act on Individual and Collective Contracts*, NATIONAL DEVELOPMENTS IN THE INTERSECTION OF IPR AND COMPETITION LAW – FROM MAGLITE TO PIRATE BAY, ed. Hans Henrik Lidgard, 2011.

¹³² U.S. Copyright Office, *Report on Orphan Works*, *supra* note 2, at 70.

¹³³ It is not completely clear what the Office meant by “reduc[ing]” rights. From the context of the discussion it appears to mean when authors wish to waive some of their exclusive rights to the work without necessarily entirely committing the work to the public domain. For example, an author might wish to allow others to make adaptations of the work, provided those adaptations are non-commercial and list the author’s name. Or, an author might wish to allow unrestricted reproduction by the public, but not adaptation. This appears to be similar to some of the functions encompassed by Creative Commons.

¹³⁴ U.S. Copyright Office, *Report on Orphan Works*, *supra* note 2, at 71.

¹³⁵ Maria A. Pallante, *Orphan Works & Mass Digitization: Obstacles & Opportunities*, 27 BERKELEY TECH. L.J. 1251 (2012)

¹³⁶ *PicScout Platform: Enrolling, adding, or deleting images*, PICSCOUT (last visited Feb. 21, 2014), http://www.picscout.com/wp-content/uploads/2013/09/API-Onboarding_Updated.pdf.

¹³⁷ *PicScout Tracking Solutions*, PICSCOUT (last visited Feb. 21, 2014), http://www.picscout.com/wp-content/uploads/2013/09/Picscout_Tracking.pdf.

¹³⁸ *About TinEye*, TINEYE (last visited Feb. 21, 2014), <http://www.tineye.com/about>.

¹³⁹ *About Us*, IDEE, INC. (last visited Feb. 21, 2014), <http://ideeinc.com/about/>.

¹⁴⁰ *What is MatchEngine?*, MATCHENGINE (last visited Feb. 21, 2014),

<http://services.tineye.com/MatchEngine>.

¹⁴¹ *About PLUS Registry*, PLUS REGISTRY (last visited Feb. 21, 2014), <https://www.plusregistry.org/cgi-bin/WebObjects/PlusDB.woa/1/wo/PM1zITgAcg4Py5PzynwXLM/0.107.27>.

¹⁴² Molly Shaffer Van Houweling, *Atomism and Automation*, 27 BERKELEY TECH. L.J. 1471 (2012)

¹⁴³ Shaffer Van Houweling at 1483.

¹⁴⁴ Michael Aaron Crookston, *Image Recognition Technology and Orphan Works Solutions*, 1 LANDSLIDE 50 (2009)

¹⁴⁵ Crookston at 52.

¹⁴⁶ Daniel J. Gervais and Dashiell Renaud, *The Future of United States Copyright Formalities: Why We Should Prioritize Recordation, and How to Do It* (Vanderbilt Pub. Law Research Paper, Working Paper Series No. 13-40), available at <http://ssrn.com/abstract=2318496>.

¹⁴⁷ Jane C. Ginsburg, *'With Untired Spirits and Formal Constancy': Berne-Compatibility of Formal Declaratory Measures to Enhance Title-Searching* (Columbia Pub. Law Research Paper No. 13-346) (September 16, 2013), available at <http://ssrn.com/abstract=2262924> or <http://dx.doi.org/10.2139/ssrn.2262924>.

¹⁴⁸ Darrin Keith Henning, *Copyright's Deus Ex Machina: Reverse Registration As Economic Fostering of Orphan Works*, 55 J. COPYRIGHT SOC'Y U.S.A. 201, 217 (2008)

¹⁴⁹ Henning at 218.

¹⁵⁰ Stef van Gompel, *The Orphan Works Chimera and How to Defeat It: A View from Across the Atlantic*, 27 BERKELEY TECH. L.J. 1347 (2012)

¹⁵¹ Alexis Scott, Small Business Association Roundtable: Orphan Works Compliance: An Impossible Burden for Small Businesses (Aug. 8, 2008) (publisher of *The Workbook* and workbook.com).

¹⁵² See Telephone Interview with David Green, Assistant General Counsel at Microsoft (Feb. 21, 2014).

¹⁵³ *S.O.S., Inc. v. Payday, Inc.*, 886 F.2d 1081 (9th Cir. 1989).

¹⁵⁴ *Lomah Elec. Targetry, Inc. v. ATA Australian Aids Training Party, Ltd.*, 828 F.2d 1021 (4th Cir. 1987).

¹⁵⁵ The United States already does this in a limited way, with the requirement that U.S. works, but not foreign works, be registered as a prerequisite to filing suit for infringement.

¹⁵⁶ Berne Convention for the Protection of Literary and Artistic Works, Art. 9(2) (Paris Text 1971).