



of online digital media (to transfer, bequeath, donate or destroy such ownership); and (3) consider USCA 17 §107 “fair use,” USCA 17 §109(a) “first-sales,” USCA 17 §117 “Digital Backup Copy,” USCA 17 §408 (d) “Corrections and Amplifications,” USCA 17 §708(b) (4) “fair and equitable fees,” USCA 17 §801 (b) “Royalty Judges,” and USCA 17 §804 (a) “filing of petitions” in the Copyright Office to establish the regulatory process to recognize, protect, and manage consumer rights in online media material objects.

### **BACKGROUND**

The advent of “cloud media” presents a new and pressing need for the Office to reconsider the legitimate registration of specific ownership for consumers who purchase existing first sales rights under §109 of the United States Copyright Code (Title 17 of the United States Code). As early as August of 2001, the Office noted in its *DMCA Section 104 Report* that “[t]he application of section 109 to digital content is not a question of whether the provision applies to works in digital form — it does.”<sup>2</sup> The Office went on to say that “[l]ikewise, a lawfully made tangible copy of a digitally downloaded work, such as an image file downloaded directly to a floppy disk, is subject to section 109.”<sup>3</sup> The same “Report to Congress” in 2001, however, did not consider online digital ownership or the right to put personal media into the cloud; rather, it considered the ability to transmit a work digitally in a manner “so that another person receives a copy of the work.”<sup>4</sup> The 2001 report addressed whether a transfer of ownership was within the scope of the §109 defense. Today, cloud media raises further questions about consumer rights and the interactions between §107 fair use, §109 first-sale rights, and §117 digital backup of a computer program.

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<sup>2</sup> U.S. Copyright Office, *A Report of the Register of Copyrights Pursuant to §104 of the Digital Millennium Copyright Act*, pursuant to Pub. L. No. 105-304, 112 Stat. 2860, 28, (Aug 2001), pg. 78.

<sup>3</sup> *Id.* at 78.

<sup>4</sup> *Id.* at 79.

What the Office did not foresee in 2001 was how technology would change, how physical objects like books, tapes, or discs would not be necessary for digital media to be sold, or how consumers using their §107 fair use rights could convert digital content from a media material object into an online digital media material object (for time-shifting, place-shifting, and space-shifting). The Office did not foresee at the time that even the disc or portable memory device was essentially going to disappear and be replaced by online media materials, potentially bringing an end to the first sale doctrine altogether – if certain factions get their way.<sup>5</sup>

There is currently an exploding consumer demand for “cloud” media services. Consumers who own online viewing or listening rights to movies, music, ebooks, games and other digital media wish to utilize their computers, mobile devices, web enabled TVs, Local Area Networks (LANs); Wide Area Networks (WANs); and World-Wide-Web (Internet) services to store, stream, watch, listen, view, read, and/or otherwise exercise and enjoy all the media viewing and listening rights they have purchased.

Online digital media presents a major change in how we normally think of media material objects. Several groups and entities have adopted strategies to deal with the new nature of online media material objects. For example, a consortium of major Hollywood studios, consumer electronics manufacturers and retailers, network hardware vendors, systems integrators and Digital Rights Management (DRM) vendors was announced in September 2008 by Sony Pictures Entertainment CTO. The consortium is called the Digital Entertainment Content Ecosystem or “DECE.” The DECE was chartered to develop a set of standards for the digital distribution of premium Hollywood content and this Consortium has aggressively launched the new

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<sup>5</sup> Groups like the Electronic Frontier Foundation (“EFF”) have been very active in the Copyright Office Rule-Making. (“From the beginning, EFF has championed the public interest in every critical battle affecting digital rights.”). On the other hand, groups like the Motion Picture Association of America have opposed almost all attempts to recognize or move customer media rights to the cloud. See Dkt. RM 2011-07.

“UltraViolet” digital “cloud” service in which consumers are supposed to be able to “set their entertainment free.”<sup>6</sup>

As a DECE competitor, the Walt Disney Company (in conjunction with Apple) has announced its version of a similar service, originally called “Keychest,” in October of 2009. Ultimately the launch of Apple’s “iCloud” (in October of 2011) bore quite a few resemblances to the original Keychest concept, but iCloud lacked any registrations of media authorization, keys, or ownership for media outside of its iTunes systems. Apple has touted iCloud as an “automatic and effortless service to seamlessly integrate consumer content on all devices.”<sup>7</sup> iCloud comes free with any mobile Apple device running its iOS 5, however, it is exclusive to Apple branded devices.

In March of 2012, Walmart/Vudu announced a “disc-to-digital” service for converting DVDs into an online library to “unlock your DVDs.” Walmart says their service will give “America ... the freedom to watch your movies any time, any place.”<sup>8</sup> On April 16, 2012, the service was launched in more than 3,500 stores through a partnership with major Hollywood studios including Paramount Home Media Distribution, Sony Pictures Home Entertainment, Twentieth Century Fox Home Entertainment, Universal Studios Home Entertainment and Warner Bros. Home Entertainment.

Digital memory devices that include flash memory such as SD, micro SD, nano SD, USB, PCMCIA, and other technologies for delivering purchased media titles also have been proposed as potential replacements for media material objects, but they have not caught on with

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<sup>6</sup> <http://www.uvvu.com> .

<sup>7</sup> <http://www.apple.com/iCloud>.

<sup>8</sup> Walmart/Vudu press release, *Walmart Entertainment Division, Walmart to Unlock America's Favorite Movies with Exclusive Disc-to-Digital Service, Retailer Partners with Hollywood to Increase Value of Movie Ownership with Any Time Access to DVDs* (March 13, 2012) [http://www.vudu.com/disc\\_to\\_digital\\_press\\_release.html](http://www.vudu.com/disc_to_digital_press_release.html). downloaded May 28, 2012.

consumers. Instead, the industry has been adopting the above described “cloud” services that allow consumers access to stream, download, or otherwise view the digital rights that they have purchased either online or through “digital copy”<sup>9</sup> at a retail store.

All of the above efforts indicate that book publishers, Hollywood Movie Studios, Record companies, and independent content creators are ready, willing, and able to put first-sale *Digital Rights Storage* into the market place, but for unknown reasons have refused to incorporate consumer ownership rights or ownership tracking into their methodologies. When we use the term “Digital Rights Storage” herein, we refer specifically to those §109 rights that were obtained through the purchase of on-demand and real-time downloads. In the old days, the ownership that was transferred through a consumer purchase of content media, or the subsequent resale of that media, was easily tracked via the physical “media material objects” themselves, including hard-cover or paperback books, vinyl records, cassette or eight-track tapes, VHS or Beta video cassette tapes, Compact Discs (“CD”), Digital Versatile Discs (“DVD”), High-Definition Digital Versatile Discs (“HD-DVD”) and most recently the Blu-ray discs (“BD”). Simple “Digital Storage” refers only to those cloud storage and file locations (i.e., the hard drives) where technology companies provide online cloud storage of media files (services such as iCloud, Google Play, mozy, Dropbox, or carbonite, for example).

Industry practices show that giant publishing conglomerates fully understand consumer demand for both Digital Storage and Digital Rights Storage in the cloud. However, industry usurpation of online media “licensing” (when there appears to be no physical media material object) may create impediments for consumers exercising lawful ownership rights. For example,

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<sup>9</sup> “Digital Copy” is a marketing term for a commercially distributed computer file containing a media product such as a film or music album. The term contrasts the computer file with the physical copy (typically a DVD or Blu-ray Disc) with which the digital copy is usually offered as part of a bundle.

when purchasing a “Digital Copy” through “Ultra-violet,”<sup>10</sup> the consumer is promised only a few downloads for an undefined period of time without any actual ownership attributed to any of the online viewing rights purchased.

In this petition, we propose that the proper way to achieve legitimacy in tracking consumer ownership of digital cloud media is for the Copyright Office to adopt a true *Digital Rights Storage* registration system. Record companies, book publishers, Hollywood movie producers, and independent film makers will benefit from this type of registration. As consumer access becomes more ubiquitous, the registration of all cloud media rights and authorizations becomes paramount for monetization. In fact, ownership *registration* may become even more important to cloud media than tracking and delivering those rights.

A goal of any registration for §107 fair use, §109 first-sale, and §117 digital backup should be to ensure that artists, producers, and distributors get paid for their works of authorship. The digital “back-up” rules or “exemptions for temporary buffer” copies in Random Access Memory have been enlarged to a new set of viewing or listening rights when multiple transmission sources are used in the cloud. However, the ownership rights in new online media material objects must be recognized.

Digital Rights Storage as defined herein is not the central place where media is stored and accessed, but rather, is the centralized place where legitimate and verified *ownership* of the viewing and listening use rights is separately recorded.<sup>11</sup> From this compilation of rights,

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<sup>10</sup> UltraViolet (UV) claims to be a digital rights authentication and cloud-based licensing system that allows users of digital home entertainment content to stream and download purchased content to multiple platforms and devices. UltraViolet touts a “buy once, play anywhere” approach that is supposed to allow users to store digital proof-of-purchases under one account to enable playback of content that is platform- and point-of-sale-agnostic.

<sup>11</sup> Despite the fact that the internet can be thought of as a logical or virtual realm, the internet is still a very real and physical place. The telecommunications infrastructure that supports the internet includes servers, wires, fiber, routers, gateways, transmitters, repeaters, switches, hubs, stations, satellites, and every other piece of telecommunications hardware you can possibly imagine. Simply because we as human beings envision the internet

authorization and legitimate access will necessarily follow. A First Sales Copyright Registration would serve as the media material object and it would obviate the need for a physical object in order to track precisely what rights had been obtained and by whom.

### **EVOLUTION OF DIGITAL OWNERSHIP**

When we refer to a copyright “owner” we normally think only of the person who authored the original work or that author’s “assignee.”<sup>12</sup> Full and undivided ownership, however, is not the only kind of property right that exists in copyright. Viewing or listening rights also are associated to the term “material object,” such as the right to sell a music CD to a consumer.<sup>13</sup> Selling of a music CD does not transfer any of the remaining exclusive rights of the copyright owner. However, such transfer does create §109 first-sale ownership. For example, 17 U.S.C. §109 first-sale doctrine codified a type of ownership right that is transferable.<sup>14</sup>

In today’s electronic world, we must accept the simple fact that online files actually do exist in physical realms, and that transmission media, whether wired or wireless, have real and physical substance and comprise physical matter. There is nothing in the law that limits material objects to records, tapes, or discs. The perceived primary obstacles to recognizing online media material objects are unfounded. “Material object” is the general language for which the law was intended. The law therefore should not be interpreted to exclude hard-drives, ethernet cables, Random Access Memory buffers, switches and routers, or really any physical media on which data is either stored or transmitted. The “digital copy” movement by Hollywood studios is direct

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as virtual, does not mean that it is ethereal. The internet is made up of physical assets and we are fully capable of determining when and where any particular file is stored or transmitted.

<sup>12</sup> See 17 U.S.C. §201.

<sup>13</sup> 17 USC §202 (“Transfer of ownership of any material object, including the copy or phonorecord in which the work is first fixed, does not of itself convey any rights in the copyrighted work embodied in the object; nor, in the absence of an agreement, does transfer of ownership of a copyright or of any exclusive rights under a copyright convey property rights in any material object.”).

<sup>14</sup> *Bobbs-Merrill Co. v. Straus*, 210 U.S. 339 (1908). The statutory right to sell did not also create a right to limit resale.

evidence of this broader §109 ownership concept, and the demand for digital copies is direct evidence that consumers desire some kind of proof of that ownership. The time has come, therefore, to create digital ownership registration for online material objects.<sup>15</sup>

Film producers, book publishers, and music studios are so concerned with piracy that their digital media systems focus more on loss prevention than on meeting consumer demand. As a result, consumer demand for digital ownership – at least as it is marketed at present – is beginning to disappear. Large consortiums for entertainment media offer download and streaming services but ownership of the online media material objects is still missing. Many of the “digital copy” services currently available today (like “Ultraviolet” for example) do not offer ownership tracking or even the consumer digital dashboards to display and/or manage ownership in consumer media collections.

Without recognized consumer ownership, confidence in “Digital Copy” and “Ultraviolet” have resulted in major consumer “dislikes”<sup>16</sup> for these services. The full report cards for such services do not look good. Without verifiable and registered ownership, the industry simply seems to be charging consumers multiple times for access to the same media they already own. Consumers feel like they have to purchase the same media over and over again. There is nothing

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<sup>15</sup> On October 28, 1998, H.R. 2281, the Digital Millennium Copyright Act (“DMCA”), was enacted into law. Section 104 of the DMCA directs the Register of Copyrights and the Assistant Secretary of Commerce for Communications and Information to prepare a report for the Congress examining the effects of title 1 of the Digital Millennium Copyright Act, (“DMCA”), the development of electronic commerce on the operation of sections 109 and 117 of title 17, United States Code, and the relationship between existing and emerging technology and the operation of such sections. <http://www.copyright.gov/reports/studies/dmca/sec-104-report-vol-1.pdf> .

<sup>16</sup> Lawler, Ryan, Warner Bros, turns to Twitter to promote #Ultraviolet, <http://gigaom.com/video/warner-bros-twitter-ultraviolet/> (Nov, 10, 2011) (“UltraViolet has received scathing reviews from consumers who purchased The Green Lantern and Horrible Bosses: the first two titles to be released with the streaming copy attached.”); Shaffer, R.L., OPINION: Why Ultraviolet is Frustrating, <http://bluray.ign.com/articles/122/1220773p1.html> (Mar. 14, 2012) (“Ultraviolet ... draw[s] criticism and angry comments with nearly every single news piece, review or column that includes them. It would seem that many people have a distinct distaste for UltraViolet.”).

to help the consumer realize that what they are actually purchasing are not the viewing rights but the viewing access or data transmission services.

While the consumer should know that downloading or streaming communication services are not free, the copyright owner who sold viewing rights to the consumer should not be paid multiple times for those same viewing rights. Consumers need to see some form of sanctioned and certified ownership. Then and only then can consumers feel comfortable knowing that it is only the internet connection and/or streaming services they are being charged for to bring the media they already own to where and when they want it.

Lack of ownership has resulted in poor consumer focus. This ultimately has led to poor consumer adoption rates. It seems difficult to even understand the industry impetus behind these perceived efforts to hide ownership from the consumer. The publishing industry seems to want to kill any and all self-storage of digital media on local hard drives or Network Accessible Storage (“NAS”) or Storage Area Network (“SAN”). This lack of self-storage, however, actually takes away some of the bandwidth opportunities that could strengthen current media streaming architecture. Content distribution networks (“CDNs”) are being overwhelmed as the percentage of data transmission on the internet for content media has grown to over 90% of overall data transmission. Efficiency in removing bottlenecks on the internet is all about getting the media to multiple “end locations.”<sup>17</sup> The personal media collection (as a concept) could actually assist in creating better bandwidth optimization.

Piracy and the desire to make illegal copies will greatly diminish when legitimate media collecting can again become the consumer norm. As encrypted file containers for media become ubiquitous in the cloud or on local data storage, the convenience of ownership registration will

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<sup>17</sup> See Saltzer, J. H., Reed, D. P., Clark, D. D.: “End-to-End Arguments in System Design,” ACM Transactions on Communications, 2(4), 1984.

legitimize consumer demand and remove much of the impetus to break authorization and decryption codes. Online services that allow upload and streaming will more easily be able to distinguish between unlicensed viral video and licensed commercial video. If a commercial video with broken encryption happens to be uploaded to an unlicensed forum, it will be detected easily whether or not the content has been illegally copied. Not only can we detect the copying, but we can also detect who the First Sales rights owner is (see content fingerprinting, below). When a consumer knows that commercial media is easily detected and linked back to the owner, the value of illegal copying to a rogue hard drive or other memory device like the old physical media writeable discs, becomes much less desirable – especially when there is a registration system that allows them to copy encrypted file containers wherever they are needed.

In a Cloud Media and/or Crowd Media situation, it ultimately will cost the consumer more to circumvent the encryption systems by utilizing slow bandwidth over P2P (or other slow and virus laden systems) than it would to simply utilize the legitimate systems for moving their encrypted content around in the cloud. Encrypted content also makes parental settings for certain types of content media much easier for the end-user to control.

It is at this point that the interaction between “Cloud Media” and “Crowd Media” needs to be further defined. “Cloud media” is an extension of cloud computing, which is moving IT-based services off of local PCs and onto data center servers. “Crowd Media,” on the other hand, refers to large numbers of people accessing data through the same data transmission bandwidth “pipe” from within a centralized geographic or internet transmission layer (such as from within a stadium or crowded urban location). In a Crowd Media situation, “connection speed” may be

fast, but the crowded nature of the internet “pipe” may cause diminished “data transfer rates.”<sup>18</sup>

We even see this effect in households and neighborhoods when many screens are accessing media through the same streaming services. Netflix has encountered this problem in delivering different movies or shows to more than one screen within the same household.

**“Circle Section”  
A SUGGESTED “FIRST SALES REGISTRATION MARK”  
FOR ONLINE MATERIAL OBJECT OWNERSHIP**



Vibme takes very seriously both industry rights under copyright law and consumer demands for better ubiquitous cloud access to purchased media rights. We believe that a new registration mark can go a long way in providing the consumer confidence in ownership that is needed. Vibme recommends the adoption of the “Circle Section” symbol. That symbol can apply to §107, §109, and §117 online media material object registration. Vibme believes that first-sale “Circle Section” registration services will allow fair and reasonable methods for consumers to register their ownership of online digital media rights under the existing statutory framework while at the same time respecting the copyright protection that ensures the continuation of the creative process.

The © copyright symbol (Copyright Act of 1909) and the ℗ “Sound Recording” or Phonorecord” symbol (The 1971 Sound Recording Act) were developed long enough ago that there is little likelihood for customer confusion about the source or use of these symbols. However, a standard Unicode © symbol might become confused with several other commercial trademarks presently in use ranging from western “dude ranch” branding-irons to a Richmond

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<sup>18</sup> In telecommunication, effective data transfer rate (or bit rate) is an average number of units of data, such as bits, characters, blocks, or frames, transferred per unit time.

Virginia studio called the “Circle S studio.”<sup>19</sup> Whatever symbol ultimately is used (or even if no mark is used at all), a central registration for First-Sale ownership rights that includes the owner’s name, media title, type, quality, resolution, and the associated viewing or listening rights, will greatly enhance consumer trust and adoption of new “cloud” media services.

### **Rules of use for display of the “Circle Section” Mark** §

Of course, there is no need for everything on the internet to have material object registration. In fact, most things on the internet should not and cannot be registered as copyright material objects. Only those online media material objects that have both been sold and have legitimately requested registration should receive the mark. With the growing popularity of cloud technologies, registration of First-Sale Online Media is both desirable and necessary for consumers to put media they already own into the cloud for viewing wherever and on whatever device the consumer chooses.

The Mark, §, should exist in the file header and should be readily discernable from the content (see fingerprinting below). It should appear (or be displayed) at the beginning of playback for visual media content like books or video whenever a participating media selection is viewed by a consumer. With audio only media, the “Circle Section” Mark, §, should appear either with the cover art or in conjunction with the dashboard interface that displays the cover art. The Mark, §, should also appear (or be displayed) during online or retail purchase of a participating media selection. For a retail representation of a specific online digital asset, § should appear on the packaging and online during the redemption process. For a direct

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<sup>19</sup> Unicode U+9416, Enclosed “Alphanumerics.”

online purchase, § should appear during the acquisition and payment in a prominent location so that the consumer knows they have acquired ownership rights.

The registered first-sale ownership of online media primarily should run with identified “chattel”-ized media content. That way, the amount of data uploaded or stored by the Office to accomplish registration would be minimal (see proposed data structure below). The registered owner of §109 first sales rights can be a person or simply a registered user alias to protect privacy. Ultimately, each end-user who establishes ownership of their collection of online media materials ultimately is responsible for maintaining their own account. Creation of an online user dashboard interface on which consumers can view and manage media titles in their own account will be enabled by registration, but the Office should not provide the dashboard or user-management interface directly to consumers. Private industry should supply those services.<sup>20</sup> The Office need only supply the registration.

Download and steaming services already exist separately and need not be a part of the registration process. Service providers who wish to compete in providing account management, download, streaming, or other services will have that option. For example, the various upload and streaming services that are available today, including Netflix, Vudu, Google Play, iTunes, Hulu, Flixter, already supply serial copy management and can easily continue to supply these services once registration becomes available. Registration will not be incompatible with any digital rights management (“DRM”) or serial copy management (“SCM”) services because SCM and DRM are media player associated services that do not register ownership rights like a §109 registration system would. While DRM and serial copy management are important industry goals and requirements, and no registration system would be effective without them, it is not in

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<sup>20</sup> Vibme LLC is such a service provider.

the Office's interest to supply serial copy management or to enforce DRM. The Office need only ensure that registration does not interfere with such services.

### **Minimal registration data needs to be collected**

This petition proposes that the Office promulgate rules that will allow for a simple database structure for the registration of online First-Sales. The §109 registration process at the Copyright Office should be for ownership only and should have the fewest number of data fields possible to register each personal copy of a purchased media content title. The registration data should be limited to only the information needed for tracking ownership. Serial copy management and/or digital rights management already are prevalent in the industry and need not be tracked by the Office.

It would also not be a good idea for the consumer to transmit data directly to the Office. The extra data services that would make uploading, downloading, streaming and management of the content media should *not* be a responsibility of the Office. The Office should only be concerned with the registration of digital rights. Release authorization or certification historically has been an industry concern but industry safeguards in this area already function reasonably well. The § registration need only be a system that collects the simplest data to register a media title connected to an owner account as described herein.

Titles of works for which "Circle Section" registration is available should arise through existing electronic Copyright Office registration system ("eCO").<sup>21</sup> The Office can provide an option for Publishers, producers, or distributors who have registered their copyrights through

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<sup>21</sup> The same registration system for the eCO can also register a master copy to be used with content fingerprinting, e.g. registrant name, title, publisher, date acquired, acquisition type, quality/resolution, and associated rights. For all Cloud storage service providers who allow copyrighted materials to be uploaded to the web, the service providers should be required to allow §109 first sales registered content. Without this formally registered ownership right, any "copy" uploaded to the cloud arguably could be illegal.

eCO to allow certain formats and quality assignments of their titles to be coupled with desired §109 First Sales rights to be distributed. Copyright owners can certainly opt in or out, but opting out would place their works of authorship as indistinguishable from ordinary creative commons works as they are found today on such sites like YouTube.<sup>22</sup> The data structures below, with field names and field types, are suggested for §109 First Sales registration:

<b>Field Name</b>	<b>Field Type</b>	<b>Size or Restriction</b>	<b>Description</b>
UserName	TEXT, ALPHANUMERIC, CHAR, CHARACTER, STRING, VARCHAR	60 characters, must be unique	Alias entity creation for which all viewing or listening rights will be associated. May be linked to other accounts such as Yahoo, Google, Facebook, LinkedIn, Hotmail, or others.
Title	TEXT, ALPHANUMERIC, CHAR, CHARACTER, STRING, VARCHAR	60 characters. Must be unique from a list of Official Titles sanctioned by the Office through eCO election.	Title of the work of authorship. Book Name for books, Feature Name for film, song title for music, other title for other works of authorship.
Publisher/Producer	TEXT, ALPHANUMERIC, CHAR, CHARACTER, STRING, VARCHAR	60 characters. Must be unique from a list of Official Publisher/Producers sanctioned by the Office through eCO election.	Name of the entity owning the copyrighted work who has sold the limited viewing rights to the consumer.
Acquisition Type	CHECKBOX	Associated to a list of Official copyright acquisition types sanctioned by the Office through eCO election.	Physical Media conversion (e.g. “disc to digital”), retail purchase, or on-demand.
Media Type	MULTIFIELD CHECKBOX	Associated to a list of Official copyright subject matter types sanctioned by the Office through eCO election.	Print media, Photo/image media, video, audio, mixed compilation, database, software, game, or other.
Associated Viewing Rights	MULTIFIELD CHECKBOX	Associated to Copyright owner’s list of Memo field channel and distribution choices entered through eCO election.	Rental, download, single screen/player, multiple screen/player, terminable, perpetual, other. All rights are transferable.

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<sup>22</sup> The “Circle Section” Mark, should apply to all types of subject matter that consumers will want to own or share, from “stock” or royalty free photography to feature length films. The creative commons side of online content media distribution is already well developed, but the ownership side of online content media leaves a lot to be desired. The rulemaking process for §109 First Sales ownership registration should begin with public and private enterprise participating in the rulemaking.

## **Expanded use of Content Fingerprinting**<sup>23</sup>

Content (video, audio, photo) fingerprinting is a technique by which software identifies, extracts, marks, and then registers characteristic components of media content, enabling that content to be uniquely identified by its resultant “fingerprint.” Content fingerprinting has proven to be effective in distinguishing one copy of a particular title or work of authorship from another. The tools for content fingerprinting originally were developed for forensic purposes so specific copies of perceptually equivalent content could legally be distinguished from others, as with identifying forgery or counterfeits. It is now possible to precondition audio, video, and photos so that robust content fingerprint analysis will be possible if subsequently required. Most content identification systems, like existing internet security protocols, are easily built of open design, but knowledge of the system does not create an ability to “hack” it without also having the trade-secret keys and codes that allow the fingerprinting to occur. Content fingerprinting has technical components that make it virtually un-“hackable” to an outsider even if that person knows of, or has figured out, the intricacies of the system.

Content fingerprinting begins with a reference standard (“master file”) of the content title. A marking system makes subtle changes, outside of human perception, to the analog display rendering of the master file. The evaluation and identification of video content is then performed by comparing the extracted video fingerprints to the master copy. For digital video data, both audio and video fingerprints can be extracted, each having individual significance for different applications. The resulting analog playback is then re-digitized with permanent hidden markings, hash codes, that will follow that particular copy of the title regardless of the digital format (“mpeg,” “wav,” “wma,” 3GPP,” “avi,” “mov,” “wmv,” “mp4,” “m4a,” “m4p,” “hvcD,”

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<sup>23</sup> Serial copy management and digital rights management are services that can grow out of the Office’s §109 first sales. Content fingerprinting is a noteworthy example of a method that will enhance §109 first sales registration.

or other digital file container format), and even if the original file is “ripped” or otherwise converted.<sup>24</sup> This “analog marking” and subsequent fingerprinting ensures that even converted media will retain serialization even within an open copy management system. Content fingerprinting itself is easily detectable by crypto-machine scanning. However, it will remain virtually impossible to detect without access to both the original reference standard and the hash codes associated with the creation of the serialized copy. Thus, the system is virtually un-“hackable.”

## **JUSTIFICATION**

Ownership has impacted society throughout recorded history. In nearly all contexts, attempts to deprive citizens of ownership have had grave, even violent consequences. The legal framework already exists in Title 17 for cloud uploading and storage, with cloud delivery or “place-shifting”<sup>25</sup> services for media that consumers already own. Previous Office rulemaking, however, has neither recognized nor advanced the concept of ownership of online media. There is a compelling need for the Office to resolve these issues because the lack of clarity regarding online media material objects and their ownership has become a primary obstacle to the launch of true cloud services for consumer media collections. To ensure that cloud media services will operate efficiently here and abroad, the United States must pioneer the field of cloud media ownership. The major justifications for an agency rulemaking on the ownership of online media material objects are discussed below.

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<sup>24</sup> Analog marking (or preconditioning) is the only way to ensure that even converted media will retain its serialization within an open copy management system..

<sup>25</sup> “Place-Chasing” is the hybrid term used to define the movement of digital certificates used in all three fair uses of digital media content,: time-shifting, space-shifting, and place-shifting.

## **Potential Impact**

Estimates suggest that there are over 3 billion DVDs currently in circulation in the United States.<sup>26</sup> Those, in conjunction with music tapes, albums and CDs, and computer software and other interactive media for which consumer rights associated with fair use and first sales ownership allow consumers to make back-up copies, mean literally billions of titles that could potentially – and legally – be uploaded into the cloud under existing judicial interpretations of §107 fair use, §109 ownership rights, and §117<sup>27</sup> back-up rights. Industry indications demonstrate that consumers increasingly will want to utilize cloud services to stream all types of media that they already own.<sup>28</sup>

That is certainly not to say that those media material objects are then free to be openly redistributed or shared in violation of traditional copyright law constructs. However, without clearly recognized rights and established procedures for recording and tracking those rights, each of those billions of titles represents a potential lawsuit or enforcement action should consumers choose to upload their media for viewing or listening at a remote time or place as greater numbers of them are attempting to do. Indeed, absent a clear rule from the Copyright Office, the public and industry could end up engaging in multiple lawsuits in different forums throughout the country *for each title* since no single district court can render an interpretation of the Act or enter a judgment that would bind all consumers, all service providers, and all content-producing

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<sup>26</sup> Nash Information Services, <http://thenumbers.com>.

<sup>27</sup> Games, software, and interactive media systems may fall under §117 (computer program copies or adaptations).

<sup>28</sup> Although CD sales are declining, there are over 4 billion CDs in circulation in the United States. See Nielson SoundScan <http://www.nielsen.com/us/en.html>. Despite industry efforts to “contract around” §109 or §117 rights by selling only access rights or streaming services, there already are billions of CDs and DVDs in circulation for which those rights have not been “contracted around.”

companies.<sup>29</sup> This would be a monumental waste of resources that could better be spent to expand creative endeavor and advance technologies to enjoy it.<sup>30</sup>

The cost of implementing first sales registration for online media material objects is minimal compared to the enforcement costs that would be avoided and the revenue that would be generated as a result of innovations in technologies and services for the management of online digital collections that would develop when ownership rights in online media material objects have properly been defined.

### **Potential Consequences of Inaction**

In addition to the potential flood of lawsuits and requests for enforcement that are likely to ensue if consumer ownership rights in online media are not definitively recognized and clearly defined, there are several other potential consequences that will have detrimental effects on the relevant markets. They are described below.

### ***Industry Disavowal or Elimination of Consumer Ownership in the Cloud***

Consumer advocacy groups and media publishing advocacy groups alike appear to be fighting over the best approach for eliminating the ownership rights of the other. The Electronic Frontier Foundation, for example, has made several rulemaking petitions to the Office asking that certain consumer practices for making unregulated copies be exempted from enforcement as “fair use.”<sup>31</sup> The MPAA and RIAA, however, vehemently have opposed any rulemaking

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<sup>29</sup> E.g., DVD Copy Control Association, Inc. v. Kaleidescape, Inc., 176 Cal. App. 4th. See also Monahan, William J. (2012-03-08), DVD Copy Control Association v. Kaleidescape, Inc., Case No. 1-04-CV-031829, Permanent Injunction Order, Superior Court of the State of California, Santa Clara County, retrieved 5-29-2012.

<sup>30</sup> U.S. Copyright Office, Library of Congress, Priorities and Special Projects of the United States Copyright Office, October 2011-October 2013, published October 25, 2011 (“One of the Office’s core responsibilities is providing leadership and impartial expertise on questions of copyright law and policy. Copyright law is the engine of free expression and a major building block in the world economy.”).

<sup>31</sup> E.g., Docket No. RM 20088, Copyright Office; Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies (2003 -08); Docket No. RM 2011-07, Copyright Office, In the

proceedings that they perceive would affect the copyright owner's exclusive rights.<sup>32</sup> In addition, industry innovations have moved in the opposite direction: providing access or streaming rather than acknowledging consumer ownership in the cloud at all. Unless the Office takes action and make rules, consumers as well as content producers may find that they lose their copyrights, viewing or listening rights, and their place-shifting rights – especially once physical media like books, records, tapes, and discs have become obsolete.

### *Encouragement of Piracy*

It is well known that consumers want to view, read, listen to, and obtain content media online. The United States Copyright Office is acutely aware of this desire and understands the benefits to artists, Hollywood producers, record companies, independent film makers, songwriters, book publishers, and consumers alike for electronic delivery of content media. All factions of the industry are excited about, and are eagerly embracing, the myriad opportunities for content delivery offered by the Internet. What the supply side of the industry has not understood, however, is that the success of their innovations in content media distribution largely depends upon consumer satisfaction.

That content producers tend to overlook the consumer is evident in the failure of present industry innovations in cloud media distribution to attract and keep consumers. But since consumer demand for online media access is growing while industry ability to meet that demand has been inadequate, consumers feel they are left with no choice but to seek to satisfy that demand outside of industry channels. This, perhaps more than anything else, is responsible for

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matter of exemption to prohibition on circumvention of copyright protection systems for access control technologies (2011- ).

<sup>32</sup> E.g. Motion Picture Association of America, Inc. v. Ralph Oman, et al., 969 F.2d 1154 (D.C. App. 1992); see also Docket No. RM 2011-07, Joint Comment of AAP: Association of American Publishers, ASMP: American Society of Media Photographers, BSA: Business Software Alliance, ESA: Entertainment Software Association,, MPAA: Motion Picture Association of America, PACA: Picture Archive Council of America, RIAA: Recording Industry Association of America.

the proliferation of encryption-busting programs and the subsequent practice of illegal file sharing.

When consumers “rip” media from the material objects they have purchased to have it available on their device of choice, the value of that media material object has been almost completely diminished. This is because the circumvention of device locking mechanisms and file encryption necessarily results in a “clean” media file that subsequently could be distributed without limitation and without regard to the copyright holder’s exclusive rights. The value of copyright ownership has been all but killed.

### **America can lead the world in cloud media services and technologies**

What we have found in the American economy is that as we focus our Gross Domestic Product (GDP) strategies on bringing manufacturing back from over seas, we see that manufacturing automation has replaced many of the jobs needed for economic stability. Our service- and resource-based economies, however, bring the entertainment industry back to the forefront. Entertainment and social media become vitally important to our national economic survival, recovery, and eventual growth. We must find a replacement for the acknowledged ownership found in records, tapes, CDs, and Blurays for digital music and video entertainment to remain a truly American institution.

Since Americans have always recognized the value and worth of creative works, one thing we have always done (and have done better than anyone else in the world) is create and deliver extremely sophisticated and enjoyable art and entertainment. Becoming the first country to officially recognize digital ownership of online media material objects will create a paradigm shift in customer expectations both domestically and abroad. The value of creative works will increase and will continue to do so exponentially as online media (through cloud distribution)

allows these additional facets of ownership to become marketable commodities. If, however, we allow the fears and prejudices of industry content producers to dictate our path, the personal media collection will disappear as physical media sources become obsolete, and we will be denying ourselves the ability to profit in a major growth industry.

### **RULEMAKING**

Under Section 702 of the United States Code, the Copyright Office has the authority "to establish regulations not inconsistent with law for the administration of the functions and duties made the responsibility of the Register under this title." As the Office has recognized, section 702 "makes it plain that the Copyright Office is vested with authority to interpret provisions of the Act ...". *Cable Compulsory License; Definition of Cable System*, 57 Fed. Reg. 3284, 3290 (Jan. 29, 1992) (*citing* 17 U.S.C. § 702); *see also id.* at 3292 ("[T]he Office is charged with the duty to interpret the statute in accordance with Congress' intentions and framework and, where Congress is silent, to provide reasonable and permissible interpretations of the statute.").

The Copyright Office has frequently exercised its authority to interpret provisions in the Copyright Act relating to statutory licenses and its decisions have been affirmed by the courts. *See, e.g., Satellite Broad. and Communications Ass'n v. Oman*, 17 F.3d 344, 347 (11th Cir. 1994) ("The Copyright Office is a federal agency with authority to promulgate rules concerning the meaning and applicability of" statutory license provisions) (*citing Cablevision Sys. Dev. Co. v. MPAA, Inc.*, 836 F.2d 599, 608-9 (D.C. Cir. 1988)). The Copyright Office has affirmed this authority. *See Satellite Carrier Compulsory License; Definition of Unserved Household*, 63 Fed. Reg. 3685 (Jan. 26, 1998).

This proposal concerns consumers who want access to their previously purchased media in both home and remote locations. Vibme asserts that Circle Section registration, § , is the

correct and proper means for publishers to receive a reasonable royalty, as appropriate and as provided under existing law, while allowing consumers to place-shift such media into the cloud. For guidance in content and structure of the proposed rules, the Office should refer to existing legislative and regulatory guidance. For example, section 115(a)(1) of the Copyright Act provides that when phonorecords of a nondramatic musical work have been distributed to the public in the U.S., anyone may obtain a compulsory license to make and distribute phonorecords of the work, including acts or practices in the nature of rental, lease or lending. *See* 17 U.S.C. §§ 115(a)(1), (c)(4). Sections 251-270 of Title 37 of the Code of Federal Regulations (CFR) then establish the licensing fees or royalties that will be paid to the owner as a result of that license.

Vibme proposes that rules regarding Circle Section registration, § , be grafted into the existing structure. However, to determine the particular rules that should apply for purchases of all types of online content media, and what royalty, if any, should apply to the copies that would be produced in the cloud to allow consumers to exercise their ownership and viewing rights, it is necessary for the Copyright Office: (1) to resolve how first-sales ownership should apply to online media material object formats; (2) to determine whether a license for online consumer copies is either mechanical or compulsory upon the content owners and producers; and (3) if the license is compulsory, to determine the appropriate royalty. If such a license is not compulsory, those rights simply exist innately and mechanically, and copyright owners possess the standard right to the first-sale. In other words, automatic (or mechanical) §109 rights would mean that the specified service providers could charge consumers only for the “cloud” management and download services the consumers have purchased. There will be no extra fees or royalties to be charged by the Office.

The Copyright Office should be about protecting the copyright owners' right to be paid for their works of authorship while at the same time protecting the consumers' right to purchase and own viewing and listening rights for content media when, where, and on whatever new devices become available. The Office should not be about the business of blocking innovation or preventing new means to combine technology with the creative process. However, that is exactly what will happen if the Office allows content producers to create and maintain dominion and monopoly power over how the internet is used for distributing media that the consumer already owns. Consequently, Rulemaking that recognizes consumer ownership of viewing and listening rights of cloud media while protecting copyright owners' rights in their creative content is imperative.

### **RESEARCH OF ESSENTIAL PATENTS AND COMPULSORY FRAND LICENSING**

Before implementing any rulemaking or initiating §109 registration for online media material objects, the Office should conduct a thorough search of existing technologies and make rational determinations as to what constitutes essential patents.<sup>33</sup> Once technologies for §109 First-Sales registration are understood, essential patents and trade implications can easily be sorted out. This is an essential first step before diving headlong into an industry that has extremely high stakes in the competitive landscape.

The Petitioner, Vibme, presents a viable SBA 8(a) "non-publisher" entity without conflicts of interest and with the capability to begin an online digital rights release authorization

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<sup>33</sup> Vibme is the exclusive agent of licensing for the essential patents to retail sale of "digital copy" and thus, only Vibme is capable of being a lead source for collecting and uploading the limited data to the Copyright office. Before the advent and application of Vibme's essential patents it was simply not clear how, why, or what licenses would be required to allow the multiple legal back-up copies for consumers to access and view their own media via the various pads, tablets, netbooks, notebooks, computers, slates, smartphones, web-enabled TVs and other smart devices that are now capable of receiving network delivered media through cloud services.

clearing house for consumers to authenticate and register titles purchased according to their §109 first sales rights. The growth of add-on services to “Circle Section” Mark, (S), registration can become exponential while the registry database remains quite simple and effective as proposed herein.

### CONCLUSION

If consumer advocacy groups succeed in making it permissible to circumvent device locking mechanisms and file encryption for local storage or the unregulated use of point to point platforms, the future value to the copyright owner would be lost. However, if content producers succeed in the elimination of ownership rights in online media, the home media collection will disappear. Then, we will be denying ourselves the value of a major potential economic market. In addition, consumers increasingly may refuse to participate in industry-sanctioned online media services in favor of the precise circumvention that already deprives authors of the value of their copyrights.

The solution, however, is not to take ownership from one group in favor of the other. The solution is to clarify and strengthen both kinds of ownership -- copyright ownership and viewing/listening ownership – for cloud media, so there is value added to both. Consumers who are secure in the viewing/listening rights they have purchased will appreciate the value of additional services to transport and play that media when and where they want. In addition, the time and effort required to make illegal copies becomes prohibitively ill-conceived in a registered ownership environment.

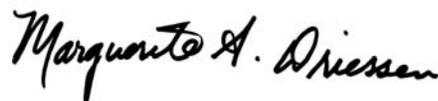
In order to address these issues, Vibme proposes that the Office amend Rules 37 CFR 201.3 and 201.20. The proposed amendments are attached hereto as **Exhibit 1**. These amendments assume that the creation and use of online media material objects will be

mechanical in nature and not subject to licensing. If the Office, on the other hand, determines that licensing of online media material objects is necessary, the Office will need to draft language to that effect and may require Royalty Judges to determine the proper amount of royalty or service fee to be paid by a consumer for such registry. Office “circular” publications may follow. Vibme LLC, has experience in these areas and can assist in this discourse.<sup>34</sup>

For the foregoing reasons, Vibme respectfully requests that the Copyright Office (1) commence a rulemaking pursuant to 17 U.S.C. § 702 to address the possible application of a “Circle Section” (§) registration mark; (2) clearly establish that consumers have ownership rights in first-sales of online digital media (to transfer, bequeath, donate or destroy such ownership) and establish the regulatory process to protect and manage those rights; and (3) if it is determined that ownership rights for cloud media storage are mechanical or compulsory, then pursuant to its existing authority under 17 U.S.C. §408, establish procedures for a preferred service provider to file an application for supplementary registration on behalf of consumers to amplify the information given copyright registrations to include online media material objects.

Respectfully submitted this 31<sup>st</sup> day of May, 2012

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Lindon, UT 84042  
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Maguerite A. Driessen, President

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<sup>34</sup> A parent patent application was filed in June of 2000, which issued as U.S. Letters Patent 7,003,500 on February 21, 2006 to Vibme owners. Since then, “child” applications consisting of continuation and continuation in part applications have issued as U.S. Letters Patents 7,636,695 and 7,743,993 issued respectively on December 22, 2009 and on June 22, 2010. These patents generally claim exclusivity over retail presentations of specific digital rights ownership for online merchandise. Because of claims to a “pioneering” type of invention the 7,003,500 patent family should be considered the “essential patents” to any online digital rights storage system utilizing retail as the primary consumer interface for digital media purchase. The patent application documents also describe various uses of content fingerprinting, rights forwarding, and media material object impairment processes for establishing proper and legal digital backup rights (“disc-to-digital”) and delivery necessary for true §109 first-sales ownership of online digital media.

**EXHIBIT 1**  
**(MARKUP)**  
**TEXT OF PROPOSED RULES**

**(PROPOSED) § 201.20 Methods of affixation and positions of the copyright notice on various types of works.**

(a) General.

(1) This section specifies examples of methods of affixation and positions of the copyright notice on various types of works that will satisfy the notice requirement of section 401(c) of title 17 of the United States Code, as amended by Pub. L. 94–553, [and establishes the notice requirements under section 408\(d\) of title 17 of the United State code, as amended by Pub. L. 94-553, for “circle section” first-sale registration as an amplification of the information given in a previous registration.](#) A notice considered “acceptable” under this regulation shall be considered to satisfy the requirement of that section that it be “affixed to the copies in such manner and location as to give reasonable notice of the claim of copyright.” As provided by that section, the examples specified in this regulation shall not be considered exhaustive of methods of affixation and positions giving reasonable notice of the claim of copyright.

**(PROPOSED) § 201.3 Fees for registration, recordation, and related services, special services, and services performed by the Licensing Division.**

(a) *General.* This section prescribes the fees for registration, recordation, and related services, special services, and services performed by the Licensing Division.

(b) *Definitions.* For purposes of this section, the following definitions apply:

(1) *Registration, recordation, and related service fee.* This is the fee for a registration or recordation service that the Office is required to perform under 17 U.S.C., or a directly related service. It includes those services described in section 708(a)(1)–(9) and authorized by Pub. L. 105–80.

(2) *Special service fee.* This is a fee for a special service not specified in title 17, which the Register of Copyrights may fix at any time on the basis of the cost of providing the service, as provided by 17 U.S.C. 708(a).

(3) *Licensing Division service fee.* This is a fee for a service performed by the Licensing Division.

(4) *“Circle Section” special registration service fee.* This is a fee for *“Circle Section”* <sup>§</sup> first-sale registration, under 17 U.S.C. 408(d), an amplification of the information given in a previous registration.

(c) *Registration, recordation and related service fees.* The Copyright Office has established the following fees for these services:

Registration, Recordation and Related Services	Fees
(1) Registration of a basic claim in an original work of authorship:	
Electronic Filing	\$35
Form–D barcode application properly completed online)	50
Forms PA, SR, TX, VA, SE; and Form CO without barcodes or incomplete information, or information added after printing (paper filing)	65
(2) Registration of a claim in a group of contributions to periodicals (Form GR/CP), published photographs, or database updates:	
Electronic filing	35
Forms GR/CP, PA, SR, VA and SE (paper filing)	65
(3) Registration of a renewal claim (Form RE):	
Claim without Addendum	115
Addendum	220
(4) Registration of a claim in a group of serials (Form SE/Group)(per issue, minimum 2 issues)	25
(5) Registration of a claim in a group of daily newspapers and qualified newsletters (Form G/DN)	80
(6) Registration of a claim in a restored copyright (Form GATT)	65
(7) Preregistration of certain unpublished works	115
(8) Registration of a correction or amplification to a claim (Form CA and Form DC)	100

(9) Registration of a claim in a mask work (Form MW)	105
(10) Registration of a claim in a vessel hull (Form D/VH)	220
(11) Providing an additional certificate of registration	35
(12) Certification of other Copyright Office records (per hour)	165
(13) Search report prepared from official records (per hour) (minimum: 2 hours)	165
Estimate of search fee	115
(14) Location and retrieval of Copyright Office materials or records (per hour)	165
Fee for location and retrieval of electronic records (per quarter hour) (minimum: 1/2 hour)	41.25
(15) Recordation of document, including a Notice of Intention to Enforce (NIE) (single title)	105
Additional titles (per group of 10 titles)	30
(16) Recordation of an Interim Designation of Agent to Receive Notification of Claimed Infringement under §512(c)(2) (single name)	105
Additional domain names (per group of 10)	30
(17) Recordation of a Notice of Intention to Make and Distribute Phonorecords (17 U.S.C. 115) (single title)	60
Additional titles (per group of 10)	20
(18) Issuance of a receipt for \$407 deposit	30
<a href="#"><u>(19) Election of intent to make and distribute "Circle Section" registered copies of online digital media.</u></a>	<a href="#"><u>XX</u></a>

(e) *Licensing Division service fees.* The Copyright Office has established the following fees for certain services performed by the Licensing Division:

Licensing Division Services	Fees
(1) Recordation of a Notice of Intention to Make and Distribute Phonorecords (17 U.S.C. 115) (single title)	\$60
Additional titles (per group of 10)	20
(2) Recordation of a licensing agreement for use of certain works in connection with noncommercial broadcasting (17 U.S.C. 118)	140
(3) Recordation of certain contracts by cable TV systems located outside the 48 contiguous states	50
(4) Amendment to Statement of Account filed pursuant to 17 U.S.C. 111, 119 or 1003)	100
(5) Notice of Digital Transmission of Sound Recording (17 U.S.C. 112 and 114)	25
Amended Notice of Digital Transmission of Sound Recording	25
(6) Photocopy of record by staff (b&w) (per page) (minimum \$12)	0.50
(7) Search and report services (per hour)	165
(8) Certification of search report (per hour)	165
<a href="#"><u>(9) Election of "Circle Section" online cloud media registration for viewing/listening rights made by a first sale licensee.</u></a>	<a href="#"><u>0.0X</u></a>