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UNCHAINED MELODY: MUSIC LICENSING IN THE DIGITAL AGE

Don E. Tomlinson[a1] Timothy Nielander[aa1]

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Lonely rivers flow to the sea, to the sea To the open arms of the sea Lonely rivers sigh wait for me, wait for me I'll be coming home, wait for me[1]

*278 I. Introduction

Like the river in *Unchained Melody,* has music been lonely? Has it longed for home? Has music been constrained by a legal system that cares more for cold, systematic ownership and compensation systems than for artistic and expressionistic freedom? Is cyberspace[2] "home" for music? Will music be "free" there? Will new compensation systems be created? The questions are many. Some of the answers, perhaps, are just beginning to come into view.

In 1955, when Alex North and Hy Zaret wrote *Unchained Melody,* including the mournful bridge quoted above, they doubtlessly had no clue that as the twenty-first century drew near the song's title and lyric would be as apropos as a reference to a legal conundrum concerning music as it would be in continuing to identify a great song. *Unchained Melody* has been recorded by surely dozens of recording artists and released by their record companies since the song was made immensely popular by the Righteous Brothers in the 1960s.[3] It is no wonder that this haunting melody has become perhaps as popular in cyberspace as it is on various recordings. Normally, songwriters consider their music's popularity to be their ticket out of sleeping (at least figuratively) in the back seat of some old car;[4] in cyberspace, however, their music may become popular without the concomitant remuneration that would change their sleeping arrangements.[5]

The problem is that while the copyright scheme knows how to compensate music copyright owners for sales of compact discs (CDs)[6] or for public performances on radio and the like,[7] performances in cyberspace are daunting because they are "unchained;" that is, they quite often occur without sufficient ***279** reference to a system of compensation generally adhered to by those engaging in such public performances.[8] It is the "unchained" nature of cyberspace that is so perplexing.[9] Illustrative of the problem is the lawsuit, discussed *infra,* that was filed by Frank Music Corp., the copyright owner of *Unchained Melody,* against the on-line service CompuServe, Inc., concerning the unlicensed and uncompensated distribution of *Unchained Melody* and other songs via the on-line service.[10]

Traditional mechanisms for gathering royalties[11] must be reworked in the context of cyberspace to account for the fundamental shift towards access and usage in electronic commerce as compared to the traditional physical movement of goods through the economy.[12] Compensation relating to musical works likely will be tied more and more closely to the consumer's *specific usage* of a composition rather than to the *acquisition* of a physical embodiment of a song in the form, for example, of a CD.[13] This concept of licensing is anything but new. Various licensing mechanisms have developed over the years as differing uses of intellectual property have been defined.[14] Licenses for music and other forms of copyrighted matter are currently ***280** parsed according to the "bundle of rights" granted in Section 106 of the Copyright Act.[15] The right to produce sheet music, for example, is licensed separately from permission to publicly perform the same composition.[16] In the context of cyberspace, the digital distribution of music in the form of binary files has created the necessity of further refinement of the nature and scope of licenses for the exploitation of musical compositions.[17] Licenses already have become the transaction of choice in the software distribution context.[18] The use of a particular copy of software is governed by a license, and software companies are quick to point out that software is not sold but is licensed.[19] Licensing in the context of cyberspace will include contracting for intangibles and a royalty-collecting mechanism.[20]

Since digital works can be disassembled and put to many types of uses which are fundamentally different from the uses of analog works, there is a greater risk of loss of royalties where license mechanisms are not calibrated to define and detect particular uses.[21] The ability to control the reproduction and particularized usage of copyrighted works can be lost very quickly in cyberspace.[22] In 1996, two songs from Irish superband U2's then unreleased POP album were allegedly heisted from computers in the recording studio and posted at Web sites in at least four countries for free downloading.[23] The issue of digital sampling, wherein small amounts of ***281** music and/or words are digitally lifted from an existing sound recording and used in a new and unconnected sound recording, demonstrates that even a quantitatively very small piece of a musical composition can be worth protecting.[24] Under U.S. copyright law, economic incentive drives the creation of expressive works;[25] in cyberspace, compensation for musical creations increasingly will be a function of technology sufficient to track the use and to collect the royalties due various rights holders.[26] It was not always so complex.

A. Music as a Facet of Copyright Law

Music publishing in the United States began humbly in 1698 when *The Bay Psalm Book* was published.[27] The publication of early musical works was driven by religious ceremonies requiring printed hymns for congregational participation.[28] In 1712, the Reverend John Tufts published *An Introduction to the Singing of Psalm Tunes in a Plain and Easy Method with a Collection of Tunes in Three Parts,* which was apparently popular due to its "plain and easy method."[29] The popularity of hymnals was evident throughout the 1700s and provided a market for the publication of sheet music.[30] In 1793, Benjamin Carr founded the first music publishing company in the United States.[31] In 1866, secular sheet music had become popular

enough to create a market exploited by Gustav Schirmer, who imported and printed classical sheet music, including compositions by Wagner.[32]

***282** During the first quarter of the nineteenth century, as many as 10,000 popular songs had been published in the United States.[33] They were typically distributed by traveling salesmen through local general stores.[34] The popular pastime embodied in the image of evening sing-alongs in the parlors of American households fueled the market, and in 1893, Charles K. Harris composed the first ever "million seller"--*After the Ball.*[35] The first "multimedia" work was produced in 1894 when *The Little Lost Child* was performed by professional singers with the projection of images simultaneously flashed on a wall with the help of a new device that could display photos.[36]

In the early years of the twentieth century, the cacophony produced by the strains of pianos and vocals spilling out of open windows in "Tin Pan Alley" on 28th Street between Fifth Avenue and Broadway in New York City spawned the modern music industry.[37] In 1927, when Al Jolson exclaimed in *The Jazz Singer,* "Wait a minute, wait a minute, you ain't heard nothin' yet,"[38] he was prophetic because the ability to record musical works for later playback catapulted music toward the multibillion dollar industry it has become in the United States.[39] The actual dollar value of American popular music is impossible to measure, in part because of an enormous piracy problem.[40] Piracy is greatly exacerbated by digital technology, which has made wholesale copying economically feasible.[41]

***283** Protecting the value of musical compositions has presented a considerable legal challenge. In this context, law seems almost necessarily reactive in nature, always lagging behind technological development concerning both new distribution methods and technological means of protecting the value of this facet of intellectual property.[42] It is often argued, with little objection, that copyright law exists and has evolved in specific relation to technological development and change; prior to Gutenberg, moveable type, and the demand for printed matter created thereby, there was no practical need to protect the writings of authors.[43] While this is a good argument, it does not seem entirely true. Music is a good example. Sheet music existed in 1790 when the first copyright act was enacted by Congress, yet music was not included in the list of that which was copyrightable. The 1790 copyright law protected "the author or authors of any map, chart, book or books,"[44] extending to them "the sole right and liberty of printing, reprinting, publishing and vending" such works.[45] An 1802 amendment extended copyright protection to "arts of designing, engraving and etching historical and other prints."[46] It was not until 1831 that music was added to the list of copyrightable subject matter by Congress.[47]

As technology advanced, copyright law lagged behind. In 1908, the U.S. Supreme Court heard a case brought by the composer of *Little Cotton Dolly* and *Kentucky Babe,* who complained that his works had been transcribed onto perforated rolls used in the then-fashionable player pianos which graced the parlors of turn-of-the-century upper-class households and which were used at storefronts to draw patrons from the street.[48] The composer, Adam Geibel, had registered and obtained copyright protection for these melodies in 1897 under the Copyright Act in effect at the time, which had granted protection for an author of musical works and gave him the "sole liberty of printing, reprinting, publishing, completing, copying, executing, finishing and vending" his works.[49] The defendant manufactured piano rolls, which functioned by permitting air to rush through strategically-located perforations in the rolls, thereby placing pneumatic pressure on the individual keys and thus "playing" the song.[50] The plaintiff argued that the Copyright Act protected the melody and all ***284** means of expression which could permit the composition to be played and heard.[51] The Court, however, found that copyright protection extended only to the statutorily covered media, which in this case was the tangible medium in which the music was fixed: sheet music.[52] The Court held that protection extended only to an intelligible written record of the music which could be read by a person.[53] The piano rolls could not be read and understood by most people and were part of a machine, and they were not copies of sheet music protectable under copyright law.[54] Congress, the Court said, would have to adopt a broader concept to cover mechanically-read copies[55]--and that is precisely what happened the following year.

The 1909 Copyright Act extended protection to "mechanical reproductions" of music, but at the same time introduced a compulsory licensing provision, discussed *infra,* for such mechanical reproductions.[56] The development of music publishing in the twentieth century has been driven in part by technology advances and in part by the royalty-splitting nature of music publishing.[57] Income sources have been identified and exploited for music in the following contexts: sheet music, sound recordings, public performances, synchronization (sound recordings combined with visual images in motion pictures and the like), videos, television programming, and now in emerging areas such as CD-ROM multimedia products and interactive works digitally distributed through cyberspace.[58] This melange of uses has created a web of varying and complicated economic interests.[59] Over the years, music, as copyrightable matter, has become something of a copyright "troublemaker"--it has raised peculiar issues, mostly in relation to advancing recordation, playback, and distribution technologies.[60]

***285 B. Traditional Peculiarities in Licensing Music**

Among the more prominent of these peculiar issues are: 1) what some call the "split copyright syndrome;"[61] 2) that not one but two copyrights are associated with recorded music;[62] and 3) that music can implicate all five rights in the "bundle of rights" granted by the Copyright Act.[63]

The "split copyright syndrome" concerns co-authorship and/or co-publishing.[64] In contrast to music, the author of a novel is almost always a single individual who either maintains ownership of the copyright to the work by licensing it herself to publishers and even movie producers, or who conveys the copyright to a single publishing company in return for contractually-based royalties.[65] To license such a copyrighted work, the entity seeking the license would deal either with the copyright-owning author or the copyright-owning book publishing company.[66] In music, there may be many owners of a single copyright.[67] First, the song may have been co-written by several individuals--say, all five members of a band. If they retain the copyright, which is common where the band records its own songs,[68] there may be five publishing entities involved, none of which is actively in the music publishing business, especially long after the band has split up and even after the copyright-owning musicians have retired from playing music.[69]

Second, even where the song was authored by a single individual, the copyright still may be split into several pieces because of economic forces.[70] For example, suppose a songwriter writes a song and conveys all but a small portion of the copyright to a music publisher in Austin, whose principal job then is to exploit the composition.[71] The publisher pitches the song to a well-known singer's record producer in Nashville. She likes the song and recommends it to the artist for inclusion on the artist's next CD project. The artist likes the song and records it for release on XYZ Records. Given the huge supply-over-demand problem vis-a-vis ***286** new songs in Nashville, the producer may want a piece of the copyright,[72] and then the artist may want a piece of the copyright,[73] and then here comes the record company wanting a piece of the copyright.[74] In the end, the copyright to a song written by a single author may end up being owned by five or more music publishing companies.[75] In Nashville, the saying is that there are more music publishing companies than there are people.[76]

Another problem is that in licensing recorded music, a license must be obtained both from the owner or owners of the copyright to the sound recording *and* from the owner or owners of the copyright to the underlying musical composition.[77] The arduous task of composing music often is represented through scenes in movies such as *Amadeus* and *Immortal Beloved,* where the composer plunks out notes on a keyboard and subsequently places goose quill to parchment in an effort to memorialize a new and captivating melody.[78] Often, the visual imagery of this process in a movie is accompanied by a swell of music purporting, it seems, to represent a sense of the "produced" sounds the composer is hearing as he writes. Interestingly, such scenes actually illustrate the composition-sound recording distinction--the song's basic melody versus how the song will sound once fully recorded and mixed, or once it is produced.[79] The underlying composition is protected under copyright law, and each recording of the composition--unique in its ***287** own way--is separately protected under copyright law.[80] Musically, there is synergy between the two separate creative acts since record producers shape the ultimate sound of a composition, and skillful production often spells the difference in whether the recording is a commercial success or a failure.[81]

The distinction between copyright protection of the composition and copyright protection of subsequent sound recordings adds further complexity in calculating licensing compensation for digitally-distributed works.[82] A mechanical license permits the "reproduction of music in a form that may be heard with the aid of a 'mechanical' device."[83] Early forms of mechanical devices, such as the music box invented in 1796 by Antoine Favre, generally contained only one composition which could be heard through the device.[84] The advent of the player piano (and similar devices) and, later, Thomas Alva Edison's "record player"[85] changed conceptions about music licensing because the producers of sound recordings also wanted copyright protection--and ultimately had the political clout to obtain it.[86] The possibility of interchanging various recordings played through one device helped create and shape the modern music industry.[87] Now, in the digital realm, compositions are rendered into digital bits which create sound files capable of playback on any device capable of replaying a binary file.[88]

***288** Although the various types of playback media now in use are vastly different technologically from previous media, the recordings played back on them still are collectively referred to as mechanical reproductions, and the permission to record a song for playback on these media is still referred to as a mechanical license.[89] After Congress, in the 1909 Copyright Act, included in the "bundle of rights" the exclusive right to make mechanical reproductions,[90] it balanced this right by *requiring* copyright owners of underlying musical compositions to license the right to make mechanical reproductions to all comers after the first permission had been given and the first recording had been released to the public for sale.[91] Although originally included to balance out a potential monopoly of the Aeolian Co., which had the exclusive license to make piano rolls for

most of the popular music existing in the early 1900s,[92] some commentators have argued that the compulsory licensing provision no longer is necessary and that mechanical licenses should be as "freely negotiable" as are other types of licenses.[93] However, as alluded to in the discussion concerning the "split copyright syndrome," getting every copyright co-owner on the same page, so to speak, may range from difficult to impossible.[94] As such, the compulsory licensing provision provides a statutory basis for compensating copyright co-owners who might never settle among themselves on a rate.[95] Further, many proponents of the compulsory licensing provision believe American music is a national treasure that neither copyright owners nor co-owners should be able to withhold from the public for any reason after its initial release.[96]

The creator of the first sound recording of an underlying musical composition must obtain permission from the copyright owner to make a mechanical reproduction (sound recording) of the work; once given, the creator of the sound recording obtains certain limited rights under copyright law.[97] The copyright owner of the sound recording is limited to the right to reproduce and distribute to the public the sounds fixed in the sound recording of the underlying composition.[98] The sound-***289** recording copyright owner also has the limited right to make derivative works of the recording by rearranging or reusing the sounds fixed in the original recording.[99] As indicated, once a song has been released one time for sale to the public, subsequent sound-recording licensees may obtain a compulsory license to make a subsequent sound recording for sale to the public.[100]

Such mechanical licenses require payment to the owner(s) of the underlying composition of the greater of an amount equal to 2.75 cents per copy or 0.5 cents per minute of the underlying composition used.[101] Anyone wishing to obtain a compulsory license must serve notice of intention to do so with the copyright owner(s) or, if the owners are unreachable, with the Copyright Office itself.[102] Compulsory licensing was extended to MIDI[103] computer files when the Copyright Office declared them to be works of authorship copyrightable as sound recordings.[104] It is important to note that a MIDI file which contains instructions for "generating motion pictures or other audiovisual works" is not considered a "sound recording" since it is an "audiovisual" work; thus, such a MIDI file is not subject to compulsory licensing.[105]

Finally, music--in contrast to most other copyrightable subject matter--can implicate from just one to all five of the rights in the "bundle of rights" granted by copyright law: the reproduction right, the derivative right, the distribution right, the performance right, and the display right.[106] For example, as is the case with the Copyright Office's declaration that MIDI files containing audiovisual instructions do not invoke the compulsory licensing provision, case law indicates that the compulsory license to record and release a musical composition that has been previously recorded and released does not extend to the visual display of the lyrics.[107] In *ABKCO Music, Inc. v. Stellar Records, Inc.,*[108] the defendant Performance Tracks, Inc., the compulsory licensee, argued that it had the right to sell "CD + G"[109] compact discs of ABKCO's song based on the compulsory licensing ***290** provision.[110] Performance Tracks, Inc. is in the business of producing CDs for use at "karaoke"[111] bars, where amateur singers entertain the bar's patrons by singing along to instrumental tracks of popular songs.[112] Stellar's CD product plays the instrumental tracks *and* provides televised images of the song's lyrics to aid the karaoke singer.[113]

The court ruled that the graphical presentation of the words implicated the display right in addition to the reproduction and distribution rights covered by the compulsory license provision[114] and that the publisher had the right to enjoin such use or presumably to be separately and additionally compensated for the display right.[115] It is notable that the first sentence in the second paragraph of the opinion in ABKCO indicated the case to be one of first impression "in terms of the technology at issue … ."[116] The technology, of course, is digitally based.[117] Some say America is the "information society,"[118] but the "digital age"[119] may be a more appropriate term of art.

C. The Digital Age and What Hath it Wrought?

It is clear that as computer hardware and software was evolving in the 1970s and the first half of the 1980s, the legal system did not sufficiently appreciate the situation.[120] The transition from analog technology to digital technology, from paper-based, chemical-based, and plastic-based media of expression to the computer chip, came faster[121]--almost sneaking up on the copyright system--and had a ***291** greater impact than imagined by most.[122] Now the legal system finds itself trying to cope with the digital age and its impact on, for example, music.[123] There was a time--a simpler time--when music licensing was complicated, but perhaps did not exceed the system's ability to derive methods of dealing with the complications. The new uses of music and the problems associated with those new uses can be quite perplexing.[124]

Cyberspace is a central feature in a cross-platform telecommunications convergence which is bringing access to global markets in the form of the personal computer.[125] The telecommunications industry is currently experiencing a wave of

technological and regulatory activity.[126] Many types of services are now offered via terrestrial telecommunications lines,[127] and private satellite networks offer promising development opportunities for the delivery of digital content.[128] One such venture, the "Teledesic" project, would place 288 low-level satellites in orbit to provide Internet service "anywhere, anytime--ubiquitous computing."[129] On the receiving end, currently marketed high-speed modems will provide the necessary bandwidth for the delivery of digital products.[130]

The interactivity inherent in digital platforms serves as the basis for the delivery of music and audiovisual works via cable, optical, and wireless modes of communication.[131] These types of electronic mechanisms support interactive ***292** environments on an international scale.[132] The World Trade Organization (WTO) and the International Telecommunications Union (ITU) are seeking common ground for the regulation of telecommunications services which form the delivery mechanisms for such intellectual property products as music.[133] An increasing amount of income from music publishing and licensing comes from sub-publishers in international markets, who collect fees for U.S. copyright owners through arrangements with U.S. music publishers.[134] Nearly 80% of music publishing revenues are generated outside the United States.[135] In Europe, the mechanical rights collection society for each particular region administers all mechanical licenses, collecting royalties based on a percentage of the retail or wholesale price for a CD or cassette--the entire recording--and not per song as in the United States.[136]

New technology is creating new methods of distributing music and is connecting musicians with global markets.[137] As music products are globally distributed, significant conflicts of laws issues will arise.[138] For example, the copyright owner's capacity to collect royalties may turn on the construction, under various international laws and treaties, of existing licensing agreements which were not written with the new technologies in mind.[139]

II. New Uses of Music

A. Effect of New Technology on Previous Agreements

What is the effect of new technology on previous agreements?[140] Just when an attorney thinks she has appropriately licensed a piece of music from its copyright- ***293** owning music publishing company, she discovers that the songwriter has sued the publishing company on the theory that the original copyright conveyance did not contemplate this "new use," such as cyberspace distribution or inclusion in a multimedia work.[141] Lawsuits have been filed by various literary authors' organizations against various publishers "challenging the reproduction of [literary] works on CD-ROMs and online services by these publishers without additional compensation to the author."[142] One literary group has said that because of lower costs to the publisher, authors should receive at least 50% of the proceeds from such electronic distribution.[143] One such organization also argues that "all rights" clauses in contracts be limited to "rights for media in existence at the time of the agreement."[144]

The problem of the effect of new technology on previous agreements crystallized with the enormous popularity of home video.[145] Music publishers reviewed existing synchronization licenses that permitted the reproduction of a musical work as part of a film soundtrack or coupled with images in other contexts and asserted that such licenses did not cover use in home videos.[146] This assertion met with mixed results because the language in many grant clauses referred to uses which were in existence at the time or to be invented in the future, and such language has provided a solid basis for the claim that the use of the music in video recordings was covered by the original grant.[147] On the other hand, grant clauses which contained express permission for the use of musical works in films but not in any other device or application have provided protection to copyright owners bringing claims for copyright infringement and/or breach of contract.[148] The most difficult license provisions to sort out referenced the particular film but did not define or restrict technological applications.[149] Without express restrictions, claims are difficult to press. On this point, a class action lawsuit was brought in the early 1980s by actor Mickey Rooney and others against several studios arguing that the studios owed compensation to performing artists based on the sale of videos for ***294** home viewing.[150] Since the artists had granted the studios very broad rights to exploit their performances without express restrictions, their claim was rejected.[151]

The scope of licensed uses related to the delivery of music via a subscription service was recently tested. In *Broadcast Music, Inc. v. 84-88 Broadway, Inc.*,[152] the court construed a license which provided background music service to a New Jersey night club.[153] The licensor of the service was Digital Music Service (DMS), which provided the background music subject to a public performance license from Broadcast Music, Inc. (BMI). The night club owners had allowed disc jockey-hosted

performances and live performances of some of the songs delivered through the service by musicians on stage at the club.[154] The defendant argued that the license from DMS covered such live and disc jockey performances, but the court disagreed and enjoined the club from "hosting any further public performances" of the various pieces which were licensed specifically from BMI for the purpose of "performing" the songs as delivered via DMS.[155]

Whether a particular use of a musical composition has been licensed may force a court to balance equities or to examine the extent to which the parties contemplated and bargained for future uses. Compensation for uses in cyberspace raises this problem since public distribution and performance of musical compositions in cyberspace may have been an "unforeseen use" until very recently. The situation may be analogized to a new form of broadcasting or public performance which could be compensated through the performing rights societies. Whether a license is construed broadly through analogy, or narrowly in favor of a copyright owner, the issue of fair compensation ultimately may be addressed in at least two ways.

Currently, the two best approaches to dealing with this problem seem to be: 1) language through which the copyright owner licenses any use to which the language is reasonably susceptible; or 2) language through which the copyright owner licenses any use that falls "within the unambiguous core meaning of the [language]"[156] at issue, or, in other words, any rights not expressly granted are reserved.[157] The problem was approached as follows in a proposed "standard agreement" between a music publishing company and a songwriter:

> ***295** The parties acknowledge that new uses of copyrighted material are created from time to time through, for example, the marriage of existing communication technologies or the invention of new communication technologies. Because the exact nature of any new uses of musical copyrights contemplated by this Agreement is not foreseeable, the parties agree that all issues arising therefrom shall be submitted to arbitration … including but not limited to whether such use is a "new" use falling outside the copyright conveyance … . Should the arbitrator rule that the use is a "new" use within the meaning of the preceding sentence, Writer agrees to convey some or all of the rights to any such "new" use to Publisher should the arbitrator so decide. Should the arbitrator determine that the use is not a "new" use, then it shall be governed as is any copyright under this Agreement.[158]

B. Virtual Magistrate Project

For cyberspace-related disputes, there is a place some disputants can go other than to court or to an arbitrator or mediator.[159] It is the "Virtual Magistrate Project, an online tribunal founded in March [1996] by the Cyberspace Law Institute."[160] The "magistrates," who are volunteer lawyers, "limit their inquiry to whether an Internet access provider should delete or restrict access to a file or message that a third party finds offensive, unlawful, or inappropriate."[161] This is not binding, of course, but it seems at least potentially helpful, especially in relation to copyright infringement problems.[162]

C. First Amendment Considerations

When copyright owners object strongly enough to seek an injunction concerning material of theirs that, for example, is being uploaded and distributed in cyberspace, some courts have become queasy about but have not been deterred by First Amendment implications.[163] For instance, in a 1995 case involving Netcom ***296** Online Communications Services, Inc., a federal district court acknowledged that "[t]here is a strong presumption against any injunction that could act as a 'prior restraint' on free speech"[164] and that "an overbroad injunction might implicate the First Amendment,"[165] but the court said it did not fear a "chilling effect" would result from "imposing liability for infringement where it is otherwise appropriate [because] [t]he copyright concepts of the idea/expression dichotomy and the fair use defense balance the important First Amendment rights with the constitutional authority for [copyright law]."[166] In broader terms, it seems fair to infer that the court ruled that the "no holds barred" approach to cyberspace preferred by some does not extend to validly existing copyrights. The court said: "Although the copyright laws were developed before digital works existed, [the copyright laws] have certainly evolved to include such works, and this court can see no reason why works should deserve less protection because they are in digital form."[167]

D. Multimedia Productions

Multimedia productions distributed by CD-ROM offer a thorny set of issues to the licensing community. In addition to it

simply being a good business practice, the multimedia producer probably should seek a broad grant because of the "new technologies" problem, as discussed above. On the other hand, the rights-holder will seek to narrow the scope of the license, usually by reserving any rights not expressly granted.[168]

Normally, the multimedia producer would want
the right to: (1) modify the work and duplicate the work and any derivatives thereof for the purpose of incorporating the work or its derivatives into a product; (2) duplicate copies of the product incorporating the work or its derivatives; (3) distribute copies of the product incorporating the work or its derivatives by sale, lease, license or lending; and (4) transmit, download or otherwise transfer or distribute the work or its derivatives as fixed in the products.[169]
The right to synchronize the musical work to images should be included as well, especially when the work being licensed is a musical work.[170]

***297** The rights-holder, on the other hand, will try to limit the grant as much as possible while still granting the specific rights necessary to facilitate the transaction. One particular limit rights-holders like to control is the duration of the license because other licensing requests or even new types of licensing requests could arise, especially for a work that is or seems about to be in some demand.[171] While the right to "sell" the resulting multimedia product normally would be central to any such licensing agreement, the rental market and language permitting rental should not be overlooked. It is probably true that being granted the right to sell the product does not of itself constitute the right also to "rent" the product.[172] Another issue that is particularly important in the multimedia context is permission to manipulate.[173] In other words, acquiring a license to use a particular work does not necessarily involve the right to manipulate or use only part of the work or to combine it in perhaps odd ways with other works.[174]

Thus, the producer will want breadth and the rights-holder will want significant limitation. These conflicting goals could be one of the thornier issues with respect to working out contract language. Further, the failure to solve this problem contractually could result in a misrepresentation action under Section 43(a) of the Lanham Act.[175]

Then, just when it seems all the problems have been worked out, a really unusual problem can arise. While it is usually prudent to use public domain materials because they are royalty-free, some of them may not be so free. When the work involves multiple authors or multiple copyrights, one or more of which may have expired and others of which may not have expired,[176] extra caution should be observed. Copyright duration periods can be different in different countries and, importantly for U.S. material, it is good to have "an awareness of renewal-period issues for pre-1976 works."[177] There also are some circumstances under which some works previously in the public domain can be or have been "recaptured."[178] While this is not a digital issue, it nonetheless should be considered.

***298 E. Cyberspace**

While the multimedia licensing world may prove pernicious, it may be child's play compared to licensing as it relates to cyberspace.[179] In 1997 in France, Francois-Xavier Bergot, a student at the Ecole National Superieure Des Telecommunications, digitized and posted in cyberspace songs of several musical artists, including some twenty compositions by Michel Sardou, a French composer.[180] Sardou had assigned performance rights and reproduction rights in his compositions to Art Music France and Warner Chappell France, who joined him in bringing a claim for copyright infringement against Bergot.[181] The court did not accept Bergot's argument that posting the music to his Web page on the student server was permissible because his Web page essentially was for his private use.[182] The court noted that the fact that third parties could access Bergot's page and download copies of the songs was a violation of the applicable copyrights.[183] Likewise, the court rejected the argument that Bergot was not liable because the copies were made by third parties who accessed his site.[184] The court found that he had given implied authority to copy songs by making them available to his Web-site visitors.[185]

A major issue in the context of cyberspace is the question of exactly what is implied in terms of licenses when material is made available on a Web site by the copyright owner. When such material is placed on the Web, is the Web-site owner purporting to grant an implied license to third parties to copy the material when such copying would otherwise constitute copyright infringement?[186] The answer probably turns on the technology and on the scope assigned to accessibility. Merely accessing a site involves the creation of at least a temporary copy of the material in the RAM of the user's computer as well

as a visual display on the user's computer monitor.[187] Depending on the number of people viewing the material ***299** simultaneously and depending on the nature of the material, the public performance right could be implicated.[188] If the end user downloads a permanent copy of a work to her hard drive and subsequently e-mails a copy to a friend, the distribution right may be implicated.[189] If a user posts a downloaded work to a bulletin board where it can be further accessed and displayed, the reproduction, display, and distribution rights could be implicated.[190] If the user creates a link from her site to the site containing the copyrighted material, is a license required? It is not at all clear what a copyright owner intends to grant, if anything, in terms of implied licenses when she makes one or more of her copyrights available in cyberspace. An implied license mechanism normally turns on the intent of the parties and on the factual context for the assertion of the license.[191] In the context of music, a copyright owner without sufficient knowledge of the power of cyberspace may find that she impliedly has given permission--even broad permission--to access and use a composition. In the *Unchained Melody* case, the copyright owners certainly had not given CompuServe permission to make the work available in cyberspace;[192] however, because "the current technology works too well" in that it can deliver thousands of accurate copies easily and quickly,[193] when a copyright owner places a work in cyberspace without specific restrictions expressed at the Web site, the scope of the permission granted to Web surfers could be impliedly broad and create serious problems once the tune is "out of the bag."

In this context, too, the "split copyright syndrome" creates significant issues since a copyright owner with only partial ownership in the sound recording copyright or the underlying composition copyright may not have the legal capacity to grant any license, express or implied, without the permission of the other owners.[194] Generally, the existence of an implied license turns on the objective conduct of the parties, but an end user probably would have no idea whether a composition made available in cyberspace had been placed there with the collective ***300** permission of all those owning an interest in the composition and/or sound recording. In any event, copyright infringement is a strict-liability tort which does not require intent to infringe;[195] rather, it requires some action which violates one of the exclusive rights under Section 106 of the Copyright Act.[196] It may be that asserting an implied license to reproduce and distribute compositions which are posted to a Web site--even if placed there by the sole owner of the copyright to the composition and the sole owner of the copyright to the sound recording--does not constitute an affirmative defense to copyright infringement. The copyright-owning plaintiff's downside, however, is that if she has posted a composition to her Web site and many copies of it are subsequently made and distributed by third parties, assessing and recouping any royalties which should have been paid by the potentially large number of putative defendants would be difficult indeed.

Already, licensing mechanisms are in place at several Web sites that specialize in marketing and distributing digitized music.[197] At a basic level, some Web sites provide for access to thirty or so seconds of music samples from the artists represented through the site, with the further possibility of licensing or purchasing music through a more traditional channel of distribution.[198] One such site, found at <http:// www.johnnyrock.com/catalog.html> (johnnyrock), provides a showcase for various artists and access to a quarterly printed publication featuring various artists.[199] By exploring on-line information about the artists, a user can click on an album cover representing a specific artist and hear a thirty-second excerpt of the artist's music.[200] Questions about purchasing or licensing music from a represented artist may be asked via e-mail to the Web site or via a link to the artist's home page from each artist's biography page on the johnnyrock site.[201] A similar site features thirty-second clips and the opportunity to purchase music as a hard copy.[202]

***301** In terms of the major players, there is a clear recognition that selling music over the Internet in any form is not yet profitable and probably will not be profitable for at the least the next several years.[203] A growing number of companies were vying for this business by early 1998, but three companies--towerrecords.com, CDNow, and N2K--are the "leading players."[204] Currently, they are distributing CDs through conventional physical delivery, but N2K envisions "a site where customers can not only order CDs but also listen to live concerts, sample music, and ultimately buy and download music--songs, whole CDs--directly."[205] That, says one N2K investor, "is the future of music retailing."[206] Because the legal and technological hurdles concerning direct music distribution are "major," it will be some time before such distribution constitutes a significant share of the market.[207]

Representing something of a hybrid between physical distribution through Internet sales of record company CDs and direct Internet distribution of record company CDs is the "mixing and matching" of individual songs. One such Web site, <http://www.musicmaker.com/>, allows customers to choose from thousands of songs to build a customized seventy-minute CD for about $15 per disk plus postage.[208] The caveats are that only minor labels have bought into this idea, the genres are limited, and both inter-label and inter-genre mixing and matching are prohibited.[209] Still, if the majors ever buy into the idea, and if the mixing and matching rules become liberalized, this service could occupy a significant market niche.

On the public-performance front, several sites have obtained licenses through the American Society of Composers, Authors,

and Publishers (ASCAP) and Broadcast Music, Inc. (BMI) for the public performance of music through Web ***302** sites.[210] The BMI Web Site Music Performance Agreement is available at the BMI web site.[211] A similar license is available from ASCAP and provides that a particular Web site may be licensed to "publicly perform, or cause to be publicly performed, by means of web site transmissions, non-dramatic renditions of the separate musical compositions in our Repertory."[212] The license limits performances to those via the computer service, and it limits the territory to the United States, its territories and possessions, and the Commonwealth of Puerto Rico; and the computer service is not authorized to grant anyone
any right to reproduce, copy, or distribute by any means, method, or process whatsoever, any of the musical compositions licensed by this agreement, including, but not limited to, transferring or downloading any such musical composition to a computer hard drive, or otherwise copying the composition onto any other storage medium.[213]

In Japan, the entertainment industry has begun requesting copyright fees for live performances of music made available in cyberspace.[214] The Japanese Society for Rights of Authors, Composers, and Publishers informed a theme park that it must pay fees for live music concerts transmitted live over the Internet.[215] The transmission had included an audio format "that disables recording by receiving-end computers."[216] Further negotiations relating to the royalty payments due for such performances are focusing on the nature of the transmissions and the extent of the rights granted under any license provision.[217] Clearly, there is significant activity in cyberspace with respect to music and music licensing; there is not, however, much case law to consider. *Unchained Melody*[218] represents the most significant case to date.[219] The case was filed in 1994 by about 150 music publishers concerning about 500 songs.[220] The plaintiffs claimed that "CompuServe was indirectly responsible ***303** for the unauthorized recording and storing of [the songs] on its computer database,"[221] the idea being that the on-line company had "permitted, facilitated and participated in the uploading and downloading by its subscribers"[222] of the songs. The case settled in 1995, disappointing those who wanted to know what the courts would say on this subject.[223] The settlement paid by CompuServe was in the mid-six figures.[224] What the settlement agreement also did was fashion an agreement between the Harry Fox Agency (HFA), which represents most active music publishers in the realm of mechanical licenses, and CompuServe with regard to how CompuServe would acquire licenses to include music on its databases.[225] The parties agreed that the licensing arrangement was in compliance with the compulsory licensing provisions of the Copyright Act and that the statutory royalty rate in effect at the time of the issuance of the license would govern payment.[226] The scope of any license granted would be limited to databases operated by CompuServe anywhere in the United States, and it was agreed that those databases would be accessible by CompuServe customers outside the United States.[227]

Under the licensing arrangement agreed to in the settlement, the person managing a forum hosted by CompuServe is issued a personal identification number (PIN).[228] When the manager wants to license a particular song, he sends an electronic request to HFA.[229] HFA then issues an electronic notice which grants the license to upload the song to the computer server and then permits the CompuServe customer to download the song to her personal computer.[230] The mechanical license permits the digital distribution of a copy of the song to the customer.[231] The license is issued under the terms of the compulsory license provision in Section 115 of the Copyright Act and the rate payable for each copy distributed is the statutory rate.[232] ***304** The licensing mechanism includes permission for the forum manager to access the HFA computer song file database.[233] CompuServe had to guarantee the royalty payments that the managers incurred at the various forums if the managers failed to pay them.[234] The license is terminable thirty days after notice of nonpayment is received, and all copies thereafter downloaded are to be considered infringing copies.[235] All payments under the agreement are to be accompanied by written reports detailing the copies made, and HFA maintained the right to access the CompuServe Information service to audit and verify the copies made and their uses.[236] All licenses were limited to nonvisual audio uses only.[237]

There are several points of interest here. First, the licensing mechanism was drafted with reference to the technology of cyberspace. Second, security measures were implemented through the issuance of PIN numbers and explicit authorization to access certain computer files belonging to the parties.[238] Third, an electronic contracting mechanism was implemented, spelled out, and agreed to regarding form and function.[239] Electronic contracting, such as that contemplated in the CompuServe settlement, is in its infancy, of course, and music licensing agreements ultimately will be subject to the electronic-contracting standards that are established from time to time in cyberspace.[240]

Although cyberspace hosts only a tiny portion of the world's commerce, cyberspace almost certainly will develop into a substantial element of the global economy.[241] The architecture of the Internet provides a basic infrastructure for global electronic commerce.[242] The infrastructure allows low-cost transmission of all types of data: text, images, and audio (including music).[243] It provides the platform on which many types of applications which facilitate business transactions ***305** can run.[244] As the popularity of the Internet mushrooms, cyberspace becomes a potentially valuable medium for businesses, many of which already are connected or are analyzing the options currently available to them for plugging into digital

commerce.[245]

Analysts predict a robust and viable electronic economy in the near future.[246] A recent report from Forrester Research found that business-to-business transactions over the Internet may reach $66 billion by the year 2000.[247] The same report estimates that by the year 2002, the total value of goods and services traded across the Internet will rise to $200 billion.[248] Increasingly, global trade is driven by technology, software, information services, entertainment products, technical information, financial services, product licenses, and professional services.[249] These sectors now account for more than $40 billion in U.S. exports alone[250] and are uniquely situated for delivery via digital transmission over wired and wireless systems because their products are intangible.[251] Consumption of intangibly based products and services will drive electronic commerce.[252] In addition, the Internet may well foster a revolution in the retail and direct-marketing sectors.[253] Consumers will have remote access to retailers around the globe and will be able to see and hear information pertaining to products and services the world over through their computer monitors or hybrid television apparatuses.[254]

***306** The two major legal issues which drive the electronic commerce debate concern the difficulty of developing secure on-line payment systems and the uncertainties surrounding the enforceability of electronic contracts.[255] Additionally, the mechanisms for connecting the various parties in commercial transactions raise questions about encryption and security.[256] Whether the architecture can be made secure and whether contracts can be made effective in a virtual environment are serious concerns.[257] The legal issues are driven in part by the types of transactions which occur in the digital realm.[258] The expanding use of Electronic Data Interchange (EDI) and other electronic contracting mechanisms and the increased drive to facilitate the electronic transfer of funds pose important legal issues.[259]

Historically, EDI was a system of electronic transacting between well-known partners which focused on electronic forms, such as those for ordering supplies.[260] EDI is a forms-based method of sending documents over a computer network, with communication occurring computer-to-computer without human intervention.[261] The purpose of EDI is to communicate important information such as "price lists, inventory levels, engineering documents" and the like across a computer network to link suppliers and customers.[262] The use of EDI has been expanded to permit EDI Internet Service Providers the capacity, for example, to "set up one-stop shops where a company could have a commercial Web site built, hosted, and maintained."[263] Wireless technologies will enable an even greater range of options.[264] EDI software vendors are expanding the technology to include software for electronic commerce.[265] Some are expanding into the realm of countertop devices which can ***307** store credit card transaction information and process transactions via smart card.[266] Traditional EDI is evolving into a broader electronic commerce platform, where graphic interfaces will contain electronic "forms" that will permit transactions between customers and businesses with a presence on the Web.[267] Software innovation is bringing the cost of traditional EDI down.[268] New applications by software vendor Actra support two emerging standards on the Internet.[269] The first is the Open Buying on the Internet (OBI) standard which permits vendors to present on-line catalogs to facilitate transactions.[270] The second standard expands EDI to work over the Internet (EDIINT).[271] The latter application moves the EDI mechanism away from private networks and into the public Internet.[272] This expansion of transactions based on electronic forms will have to be refined and customized in order to apply to the complexities of music licensing,[273] and it likely will be combined with copyright security and compensation mechanisms into a package that facilitates contracts and payment.[274] Significant developments are occurring on other fronts as well.

In one context, Congress rescued the judicial branch from the necessity of making rulings in a vacuum concerning digital music and cyberspace by amending the Copyright Act in 1995.[275] The Digital Performance Right in Sound Recordings Act, for the first time in U.S. history, granted a limited public-performance right to the copyright owner of a sound recording over and above the public-performance right always enjoyed by the copyright owner of the underlying composition.[276] Under the new law, sound-recording copyright owners have "an exclusive performance right in sound recordings that are performed by means of subscription service digital transmissions …. [This change contemplates] a shift in the sound recording industry from distribution of physical sound recordings to digital ***308** distribution."[277] As with the *Unchained Melody* settlement, the act contains licensing and royalty provisions and extends the mechanical license right to digital deliveries of sound recordings.[278] The main area of concern was to protect the copyright owner of the sound recording from high-quality, digital public performances in cyberspace that could potentially spawn commercial-quality copies, thereby potentially seriously affecting CD and cassette sales in traditional retail outlets.[279] The two main outlets for digitally-distributed works which will require licenses under this new act are music subscription services and certain interactive services.[280]

Subscription services are services which transmit music, typically over cable television systems and independent satellite systems, and enable the customer to pay for various channels of music without commercials.[281] The transmission is limited to those participants who pay for the subscription.[282] The new provision does not apply to audiovisual transmissions, such as

music videos.[283] A subscription service may acquire a compulsory license to publicly perform the sound recording if it follows certain requirements.[284] The subscription service may not play more than three selections from a particular sound recording during any given three-hour period and may not play more than two songs consecutively.[285] In the case of a sound recording compilation sold as a boxed unit, no more than four selections may be played in a given three-hour period, and no more than three selections may be played consecutively.[286] These restrictions prevent the service from sequentially playing all or a substantial part of a CD because such playing undoubtedly would encourage the "free" recording by consumers of digital-quality sound recordings in competition with sales at traditional outlets.[287] The service cannot publish advance schedules or make announcements of upcoming songs and must include any digital ***309** tag accompanying the sound recording which notes the artists and other copyright management information.[288] Subscription services choosing not to abide by these requirements must negotiate individual licenses.[289]

The second type of service which requires a license from the copyright owner of a sound recording is the "interactive service."[290] The interactive service is defined as "one that enables a member of the public to receive, on request, a transmission of a particular sound recording chosen by or on behalf of the recipient."[291] The types of services included would be "audio-on-demand services, pay per listen services, and 'celestial jukebox transmissions.'"[292] Although the law principally was engineered to cover subscriptions through cable television and satellite transmission services, the Recording Industry Association of America has taken the position that World Wide Web sites which charge access fees could be hosting public performances which would require licenses from the sound recording copyright owner under this act. The shift to music distribution via the Internet is currently driven by advances in technology which could bring compulsory sound recording licenses to the Internet for certain types of performances.[293] It is unclear whether and to what extent this new federal law affects the *Unchained Melody* settlement agreement; obviously, however, they overlap to some degree.

The American Society of Composers, Authors, and Publishers (ASCAP), the oldest of the three performing rights organizations in the United States, created the Department of New Media & Technology Strategy in 1995, the function of which was to move ASCAP onto the Information Superhighway.[294] In fashioning a license to facilitate the use of its repertoire in cyberspace, "licensees [are offered] the opportunity to elect from among four rate schedules the one that the online licensee determines best suits its needs."[295] The limitations include prohibitions.[296] License agreements with ASCAP, Broadcast Music, Inc. (BMI), and SESAC[297] concern the copyright to the underlying musical composition.[298]

*310 F. Digital Sampling

Another problem in music licensing in the digital age concerns what is known as "digital sampling."[299] Digital sampling can be defined as the electronic lifting of portions--usually a small portion--of an existing piece of recorded music for use in a new work.[300] Sampling has implications for the owners of the underlying copyright and for the owners of the sound recording copyright.[301] The "rap" music genre makes extensive use of digital sampling.[302] Since the opening-shot case of *Grand Upright Music, Ltd. v. Warner Brothers Records, Inc.*[303] in late 1991, samplers have understood that using digital samples is not normally covered by the fair-use provisions or by any other such defense.[304] Prior to *Grand Upright,* many digital samplers thought it just might not be necessary to acquire a license to sample part of an existing recording into a new recording.[305]

In *Grand Upright,* a rap artist using the pseudonym "Biz Markie" had asked the owner of the copyright to the sound recording and the copyright to the underlying musical composition--who, oddly, happened to be the same person (he was also the artist performing the sound recording)--for permission to digitally lift the three words "alone again, naturally" and the accompanying music from the sound recording of the same name and insert the sample into a new rap composition titled "Alone Again."[306] The owner of the copyrights, Gilbert O'Sullivan, refused permission, but the rap artist sampled the song anyway, and this lawsuit resulted.[307] The court made clear its view that such behavior infringed the copyrights involved and enjoined the further distribution of the CD containing the infringed material.[308] Since that time, license agreements have been developed that spell out the relationship between the sampler and the sampled.[309]

*311 III. Solutions and Conclusions

A. Electronic Compensation and Licensing Mechanisms

There are several products under development which are designed to track digital content and identify its creator. Recently, a digital object identifier (DOI) was to have been introduced at the Frankfurt Book Fair.[310] The DOI is a "standard method for

identifying digital content in digital commerce."[311] A DOI has two components: a prefix and a suffix represented by numerical codes.[312] The prefix identifies the publisher, and the suffix identifies a particular work.[313] The system operates as a large library catalog which matches DOI identifiers with the current Internet address where the work, or information about the work, is available.[314] An interested Web surfer could access the Web site and obtain information about the work or be given permission to download the work from the Web site.[315] The system has received considerable international support from various publishers and associations who see the identification and tracking of digital content on the Internet as a primary concern.[316] Two ideas being considered for implementation are electronic validation of commercial transactions and verification that content tagged with a DOI has digital watermark or wraparound technology before it is allowed to be downloaded.[317] Another idea concerns the use of DOI technology as a copyright management tool.[318] Thus, the DOI system would provide both the unique identification of content and "also a way to link users of the materials to the rights holders themselves to facilitate automated digital commerce in the new digital environment."[319] Currently, the system has more than 250,000 registrants, such as the International Publishers Association, John Wiley & Sons, Academic Press, Springer-Verlag, the Copyright Clearance Center, Elsevier, the American Medical Association, Houghton Mifflin, and Shepard's.[320] Ultimately, the use of DOI ***312** technology or something similar will provide "tools that publishers can use for internal content management as well as for digital commerce."[321]

Rights management issues were addressed and implemented in the 1996 World Intellectual Property Organization (WIPO) Copyright Treaty.[322] Article 12 of the treaty creates penalties for altering digital copyright management information embedded in works.[323] To the extent that digital rights management technology is the key to music licensing, it is significant that the WIPO Copyright Treaty, which now must be activated through implementing legislation in the signatory nations, contemplates the importance of tracking and identifying digital content in cyberspace.[324] In the United States, H.R. 2281, the WIPO Copyright Treaties Implementation Act, provides that "[n]o person shall circumvent a technological protection measure that effectively controls access to a work protected" under copyright law.[325] The bill would make it a violation to "manufacture, import, offer to the public, provide or otherwise traffic in any technology, product, service, device, [or] component … primarily designed or produced for the purpose of circumventing a technological protection measure that effectively controls access to a work" protected under copyright law.[326] Additionally, 17 U.S.C. § 1202 would make it illegal to:

> ***313** (1) intentionally remove or alter any copyright management information, (2) distribute or import for distribution copyright management information, knowing that the copyright management information has been removed or altered without authority of the copyright owner or the law, or (3) distribute, import for distribution, or publicly perform works, copies of works, or phonorecords, knowing that the copyright management information has been removed or altered without authority of the copyright owner or the law.[327]

There is international agreement in the music-licensing industry that identification of digital works is the key to the integrity of royalty streams.[328] In September 1997, copyright societies from around the world met to discuss a "framework for licensing the international use of musical works on the Internet."[329] The participants focused on the idea that the "overriding principle governing the use of music on the Internet is that fair remuneration must be paid for any and all uses."[330] The group determined that the most important factor in implementing licensing mechanisms is the "electronic identification of musical works" and planned to promote software mechanisms that "fingerprint" works particularly for the electronic identification of works distributed electronically.[331] While copyright management products are critical to the protection of music flowing through the digital stream, an equally difficult issue concerns the tracking and receipt of compensation.[332] Technological solutions to the problems posed by music licensing are currently being adapted for the protection of digitized content in general.[333] The focus is on combining the dual aspects of tracking content and receiving royalties based on usage.[334] One such architecture seeks to protect electronic properties while securing payment for use through a contract and licensing compliance mechanism.[335] The technology is manifested as a "DigiBox"--a "tamper-proof electronic package that binds usage, payment, and metering controls to any kind of digital content."[336] The usage of content is controlled and payment to copyright holders is automated.[337] A provider of digital content such as music would distribute the content via a DigiBox, which would specify the initial price for listening, ***314** accessing, or downloading the material and a separate price based on the specific use thereafter.[338] Usage information relating to digitized content would be automatically returned to the content provider.[339] The mechanism also would allow a content provider to protect further distribution and unauthorized usage because the DigiBox itself would pass to third parties with all usage controls intact.[340] The licensing mechanisms for capturing royalties will become increasingly refined to fit the many uses of digital music in cyberspace.[341] The many interests of the copyright owners of compositions and the many interests of the copyright owners of sound recordings will focus increasingly on identifying and marking digital materials and tying payment retrieval mechanisms into the software which distributes the material.[342]

B. Paradigm Shift

All of this said, some intellectual property lawyers and academics believe that a significant restructuring of copyright law is necessary--that the copyright paradigm is in need of a shift of some kind.[343] Some, for example, believe a scheme should be devised that would greatly increase compensation to copyright owners in the short term in return for a very substantially decreased duration period for copyrights.[344] The copyright provision of the U.S. Constitution, after all, states "for limited times."[345] That the period of duration originally was fourteen years plus fourteen years[346]--a concept appropriated from the Statute of Anne[347]--then doubled,[348] then became the life of the author plus fifty years[349] does not mean that technological change cannot render illogical what heretofore has been logical. If ***315** copyright law indeed is driven by technological change, then perhaps it is time to recognize that the technological changes brought by digitalization may require the rethinking of the reasoning behind the period of duration.[350] A piece of music copyrighted today by a thirty-year-old songwriter who lives to age eighty--a fifty-year term--plus the after-death term of fifty years means a total copyright duration period of 100 years for the song. Because society did not foresee the immense degree of technological change occurring in the second half of the twentieth century, why should it seem plausible that the hundred years of copyright protection given this new song will have much chance of real applicability? Some argue do what is possible while it is possible, and let future generations work out the problems which would seem foolish to try to define and solve now.

C. Paradigm Revolution

Those who believe in copyright paradigm revolution think the entire system should be scrapped and a new system created--perhaps using some familiar concepts--but with a view toward fashioning an entirely new system.[351] In the meantime, hedonism, undelayed gratification, the popularity of cyberspace, and standard economic forces are driving solutions that embrace-- with necessary modifications--the current system.

Footnotes

a1 <dontom@dontomlinson.com>. Professor of Journalism and Mass Communication, Texas A&M University; Adjunct Professor of Law, University of Houston Law Center. An early version of a part of this article was given as a speech by Professor Tomlinson to the Intellectual Property Section of the Dallas Bar Association and to the Intellectual Property Section of the Hawaii Bar Association.

aa1 <timothyn@prestongates.com>. Mr. Nielander is an associate in the Information Technology and Intellectual Property Group at Preston Gates & Ellis LLP in Seattle, Washington.

1 ALEX NORTH & HY ZARET, UNCHAINED MELODY (Frank Music Corp. 1955).

2 Or whatever else it might be called, such as the information superhighway, the information age, the information *autobahn,* the Internet, the World Wide Web, the celestial jukebox, the National Information Infrastructure, the Global Information Infrastructure, and other such monikers already here and sure to follow. In this article, these terms are used mostly interchangeably and in lieu of the metaphor(s) yet to be coined which will describe all these phenomena to the satisfaction of all those who do not like, for one reason or another, the terms presently used. "Cyberspace" seems the most descriptive of the situation in general and the least generally offensive.

3 Lately, it has been performed by teen-aged country music sensation LeAnn Rimes of Dallas.

4 *See, e.g.,* BUDDY KILLEN (with TOM CARTER), BY THE SEAT OF MY PANTS: MY LIFE IN COUNTRY MUSIC 253 (1993) (describing the return to Nashville from Texas of songwriter Sonny Throckmorton, who had moved home after a less-than-promising first effort in Nashville, but who, before long, desired to return). Throckmorton said to music publisher Killen: "I don't belong out here. I'm a songwriter. I want to come back to Nashville and write for Tree [Killen's company]. You don't have to pay me anything. Just promise me that if the cupboard gets bare you won't let me starve to death." *Id.* Throckmorton

returned, and, in Killen's words, "became one of the most prolific writers of hits in country music history." *Id.*

5 *See generally* Jane C. Ginsburg, *Putting Cars on the "Information Superhighway:" Authors, Exploiters, and Copyright in Cyberspace,* 95 COLUM. L. REV. 1466 (1995).

6 17 U.S.C.A. § 106(3) (West 1996).

7 17 U.S.C.A. § 106(4) (West 1996 & Supp. 1998).

8 *See generally* Don E. Tomlinson, *Journalism and Entertainment as Intellectual Property on the Information Superhighway: The Challenge of the Digital Domain,* STAN. L. & POL'Y REV., Fall 1994, at 61 (1994) (Vol. 6 Iss. 1) [[[hereinafter Tomlinson, *Digital Domain*].

9 *Id.* at 61.

10 Frank Music v. CompuServe, Inc., No. 93 Civ. 8153 (S.D.N.Y. 1995) (settled 1995) (discussed *infra* notes 218-240 and in the accompanying text).

11 Royalties are the fruits of the constitutionally granted monopoly in copyrighted works.

12 The trend toward licensing transactions in the electronic environment is demonstrated by the UCC Article 2B project, which proposes to amend the Uniform Commercial Code (UCC) to cover on-line licenses in software and certain types of information.
Article 2B deals with transactions in information; it focuses on transactions relating to the "copyright industries." It thus deals with transactions and subject matter that largely have never been directly covered by the UCC … . In the modern digital economy, these industries and subject matter are rapidly converging around the digital technology that dominates the information industry and, even, much of the goods sector … . The copyright industries and information transactions affected by Article 2B involve subject matter entirely unlike the traditional transactional framework which focuses on transactions in goods. In Article 2B transactions, the value of the subject matter lies in the intangibles, the information and associated rights to use that information.
See the Preface of the November 1, 1997 Article 2B Draft, which is available at *Uniform Commercial Code Article 2B Revision Draft Download Site* (last modified Mar. 3, 1998) <http://www.lawlib.uh.edu/ucc2b/>.

13 *See* Rochelle Garner, *Music Liberation,* WIRED, Mar. 1995, at 49, 49, 52. The music industry is moving from "atom-based commerce" to products consisting of digitized bits. Heather Dembert Rafter & William Sloan Coats, *17th Annual Institute on Computer Law: The Evolving Law of the Internet-Commerce, Free Speech, Security, Obscenity and Entertainment; From Sampling of Artistic Works to Music Distribution on the Internet: The Effect of New Digital Technology on Copyright Law,* 471 PATENTS, COPYRIGHTS, TRADEMARKS, & LITERARY PROP. COURSE HANDBOOK SERIES (PLI) 139, 149 n.6, Mar. 1997. The authors note that the recording industry has responded to the challenge of compensation for uses of digitized music in part by lobbying for the new performance right in digitally distributed sound recordings as set forth in 17 U.S.C.A. § 106(6) (West 1996 & Supp. 1998). *Id.*

14 *See generally* MICHAEL A. EPSTEIN, MODERN INTELLECTUAL PROPERTY ch. 15 (3d ed. 1997).

15 17 U.S.C.A. § 106 (West 1996 & Supp. 1998).

16 *Id.* § 106(1), (4).

17 *See* AL KOHN & BOB KOHN, KOHN ON MUSIC LICENSING 7 (Supp. 1997) [[[hereinafter KOHN ON MUSIC LICENSING]. The main volume is AL KOHN & BOB KOHN, KOHN ON MUSIC LICENSING (2d ed. 1996). Later citations to

the supplement will be indicated by the additional notation of (Supp. 1997).

[18] *See generally* Kristi L. Vaiden, *Software on the Internet: Intellectual Property Challenges,* ACCA DOCKET, Jan./Feb. 1995, at 56 (Vol. 13 No. 1).

[19] The "first-sale doctrine," set forth in 17 U.S.C.A. § 109 (West 1996 & Supp. 1998), provides that the owner of a physical copy of a work may redistribute the work by passing ownership of that particular copy by way of sale or other transfer. This concept is difficult to apply in the context of software because, although software is "licensed" and not "sold," the physical medium on which the software is delivered is normally "sold" and not "licensed" to the consumer.

[20] *See, e.g.,* the licensing mechanism established in the Harry Fox/CompuServe settlement, *infra* notes 228-237 and accompanying text. *See also* InterTrust Technologies Corporation, *Overview of InterTrust STAR Lab* (visited Mar. 31, 1998) <http://www.intertrust.com/star/STAR-overview.html> [hereinafter Technology Overview].

[21] *See* Colin Berry, *Robo(Music)Cop,* WIRED, Dec. 1997, at 63, 63. BMI has launched MusicBot, a modified search engine which "sleuths out and monitors use of music files on the Web." *Id.*

[22] Jenevra Georgini, Note, *International Digital Publishing and Territorial Copyright: Is the European Union Letting Infringers Slip Through its "Nets?,"* 21 BROOK. J. INT'L L. 243, 243-44 (1995); *see also* Corbis Corporation, *Corbis.com. The Place for Pictures on the Internet* (visited Apr. 14, 1998) < http://www.corbis.com/>. Corbis hosts a digital archive of digitized images which can be licensed for various uses. *Id.* A visit to the site will demonstrate the careful licensing mechanisms and policies which are designed to protect against misuse in the digital environment.

[23] *See Cyber-pirates May Have Looted U2's New Songs,* MINNEAPOLIS-ST. PAUL STAR TRIB., November 19, 1996, at 04B, *available in* 1996 WL 6937349.

[24] *See, e.g.,* Tin Pan Apple, Inc. v. Miller Brewing Co., 30 U.S.P.Q.2d (BNA) 1791, 1794 (S.D.N.Y. 1994) (denying summary judgment where the vocal sounds "brrr" and "hugga-hugga" appeared in an advertisement and expert testimony asserted that the defendant had digitally sampled the rap song *Stick 'Em* containing the same sounds); Jarvis v. A & M Records, 827 F. Supp. 282, 286, 27 U.S.P.Q.2d (BNA) 1812, 1813 (D.N.J. 1993). In *Jarvis,* the court denied summary judgment to the defendant, who used "ooh ooh ooh ooh," "move," and "free your body" in his song *Get Dumb. Id.* at 289, 27 U.S.P.Q.2d at 1816. These words and accompanying sounds were used by the plaintiff in his song *The Music's Got Me. Id.* at 286, 289, 27 U.S.P.Q.2d at 1813, 1816.
See generally Randy S. Kravis, *Does A Song by Any Other Name Still Sound as Sweet?: Digital Sampling and its Copyright Implications,* 43 AM. U. L. REV. 231 (1993) (discussing digital sampling).

[25] "The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in Science and useful Arts." Mazer v. Stein, 347 U.S. 201, 219, 100 U.S.P.Q. (BNA) 325, 333 (1954).

[26] *See* Berry, *supra* note 21, at 63; *see also* Technology Overview, *supra* note 20.

[27] KOHN ON MUSIC LICENSING, *supra* note 17, at 76.

[28] *Id.* at 75-76.

[29] *Id.* at 76.

[30] *Id.*

[31] *Id.*

[32] *Id.*

[33] *Id.* at 77.

[34] *Id.*

[35] *Id.*

[36] *Id.* at 78. The highly popular work was about a policeman who delivers a lost child to her mother only to discover that the mother is his long-lost wife. *Id.* The song sold more than a million copies. *Id.*

[37] *Id.* at 78-79.

[38] *Id.* at 82.

[39] *See* Alex Gove, *Name That Tune,* RED HERRING, Mar. 1996, at 30, 30. The author notes that the music business constitutes approximately $12 billion annually. *Id.* The Internet has had a noticeable effect on major music retailers, 41% of whom say on-line activity has affected retail sales. *Id.* Most of the activity focuses on on-line ordering mechanisms with the music delivered on traditional media. *See, e.g., Cdnow: Main: Homepage* (visited Mar. 28, 1998) <http://www.cdnow.com> (site permits visitors to order CDs, cassettes, movies, and other items). By comparison, another site offers both traditional ordering and the opportunity to download music directly onto a hard drive. *See Music Boulevard-The World's #1 Online Music Store* (visited Mar. 28, 1998) < http://www.musicblvd.com> (the site's e_mod, or encoded music on-line delivery, permits downloading of purchased music). The compositions may then be copied to a blank CD. *Id; see* Paul De Barros, *New Internet Site Comes Closer to Offering Online Delivery of CDs,* THE SEATTLE TIMES, Dec. 28, 1997, at G7, *available in* 1997 WL 16508994.

[40] *See* Jack Valenti, *Piracy of Creative Works No Mickey Mouse Theft,* HOUSTON CHRONICLE, May 8, 1996, at 39, *available in* 1996 WL 5597292.

[41] *See generally* Virginie L. Parant, *Copyright Enforcement in a Digital Environment: Tolls on the Superhighway,* ENT. & SPORTS LAW., Summer 1996, at 3 (Vol. 4 No. 2) (publication of the ABA Forum on the Entertainment and Sports Industries); *see also* Hari Kunzru, *Pirates Invade the Web,* WIRED, Dec. 1997, at 192, 200 (discussing the popularity of pirate radio stations disseminated over the Internet).

[42] Adam P. Segal, Comment, *Dissemination of Digitized Music on the Internet: A Challenge to the Copyright Act,* 12 SANTA CLARA COMPUTER & HIGH TECH. L.J. 97, 101-02 (1996).

[43] Tomlinson, *Digital Domain, supra* note 8, at 62.

[44] Act of May 31, 1790, ch. XV, § 1, 1 Stat. 124 (repealed 1831).

[45] *Id.*

[46] Act of Apr. 29, 1802, ch. XXXVI, § 2, 2 Stat. 171 (repealed 1831).

[47] "Musical compositions have been the subject of copyright protection since the Act of February 3, 1831, ch. [XVI], § 1, 4 Stat. 436 [(repealed 1870)], and laws have been passed including them since that time." White-Smith Music Publ'g. Co. v. Apollo Co., 209 U.S. 1, 15 (1908).

[48] *Id.* at 8-9.

[49] *Id.* at 9.

[50] *Id.* at 10.

[51] *Id.* at 11.

[52] *Id.* at 16.

[53] *Id.* at 17.

[54] *Id.* at 18.

[55] *Id.*

[56] Copyright Act of 1909, § 1(e), Pub. L. No. 60-349, 35 Stat. 1075 (current version at 17 U.S.C.A. § 106 (West 1996 & Supp. 1998)). Compulsory licensing is discussed *infra* notes 91-119 and in the accompanying text.

[57] KOHN ON MUSIC LICENSING, *supra* note 17, at 83.

[58] *Id.* at 91 (Supp. 1997). Various combinations of licensing mechanisms will be necessary in the context of cyberspace in order to create mechanical reproductions on hard drives, permit public performances, permit the delivery of digitized sound recordings, utilize the underlying composition in new applications such as multimedia works, permit digital sampling, and provide for synchronization of music with imagery.

[59] Segal, *supra* note 42, at 102.

[60] *See, e.g.,* Joel L. McKuin, *Home Audio Taping of Copyrighted Works and the Audio Home Recording Act of 1992: A Critical Analysis,* 16 HASTINGS COMM. & ENT. L.J. 311, 313-15 (1994).

[61] AL KOHN & BOB KOHN, THE ART OF MUSIC LICENSING 875-88 (1992).

[62] *Id.* at 10.

[63] 17 U.S.C.A. § 106 (West 1996 & Supp. 1998).

[64] KOHN & KOHN, *supra* note 61, at 875.

[65] Don E. Tomlinson, *Everything That Glitters is Not Gold: Songwriter-Music Publisher Agreements and Disagreements,* 18 HASTINGS COMM. & ENT. L.J. 85, 87 (1995) [hereinafter Tomlinson, *Everything That Glitters*].

[66] *Id.*

[67] KOHN & KOHN, *supra* note 61, at 875.

[68] *Id.*

[69] *Id.* at 876.

[70] Tomlinson, *Everything That Glitters, supra* note 65, at 177 n.384.

[71] *Id.* at 88, 90.

[72] *Id.* at 177 n.384.

[73] *Id.*

[74] *Id.*

[75] [E]ven though the income generated by a hit song is greater today than ever before, the pie is split too many ways.
When I first came to [Nashville in the late 1940s], in most cases one music publisher and one songwriter were able to take credit for a [song]. Today, writing and publishing credits are split among several individuals and companies. At times, the stage at awards banquets seems hardly able to hold all the recipients.
KILLEN, *supra* note 4, at 316.

[76] The principal music recording centers in the United States are New York, Los Angeles, and Nashville. Tomlinson, *Everything That Glitters, supra* note 65, at 88 n.14. The country music industry, centered in Nashville, uses songs written by non-artist, professional songwriters far more widely than any other music genre. *Id.* at 88 n.16.

[77] KOHN & KOHN, *supra* note 61, at 10.

[78] AMADEUS (Republic Pictures Corp. 1984); IMMORTAL BELOVED (Columbia Pictures 1994).

[79] During my early production days, I learned that a successful producer must have an ear for a song and know what singer it is best suited to. Not every song is for every artist. You also have to be able to hear in your head what kind of background to play, and you have to know who are the best musicians to play it. Then, once inside the studio, you have to be able to put the whole thing together.
KILLEN, *supra* note 4, at 143.

[80] *See* 17 U.S.C. § 101 (1994) (definition of "sound recordings").

[81] It should be noted that in some genres of music, the author(s) of the underlying composition likely *would* be the producer of the original sound recording, while in other genres, the songwriter(s) likely *would not* produce the original sound recording.

[82] KOHN ON MUSIC LICENSING, *supra* note 17, at 653.

[83] *Id.* Actually, the process has changed in the digital realm only to include the accommodation of computer keystrokes, as compared to those rendered on a piano, for example. In 1997, former Beatle Paul McCartney recorded his first symphony in London. *See* Terry Teachout, *Help! He's Not Doing Fine Even With a Little Help from Some Friends, the Former Beatle's Latest Classical Effort Falls Flat,* TIME, Nov. 3, 1997, at 119, 119, *available in* 1997 WL 13376207. Since McCartney never learned to read music, he hummed the melodies into a tape player. *See id.* That audio was then introduced into a computer through a musical notation program which then transcribed the composition, allowing the manipulation and shaping of the end work. *See id.*

[84] KOHN ON MUSIC LICENSING, *supra* note 17, at 653-54.

[85] *See Thomas Alva Edison (1847-1931)* (visited Apr. 27, 1998) < www.minot.com/~mps/edison/edison/edison.html>.

[86] Edison's creation was, of course, the "analog" recording by which sounds embedded in various media were impressed by means of a stylus which imperfectly reflected the electrical impulses caused by various sounds. The sounds were thus no more than "analogous"--hence the use of the term "analog." Digital recording devices translate sounds into binary code, as opposed to their being translated into analogous sound waves.

[87] *See, e.g.,* White-Smith Music Publ'g Co. v. Apollo Co., 209 U.S. 1, 18 (1908) (holding that perforated player piano rolls are part of the device producing musical compositions but were not copies within the meaning of the Copyright Act).

[88] Segal, *supra* note 42, at 102-03.

[89] KOHN ON MUSIC LICENSING, *supra* note 17, at 656.

[90] Copyright Act of 1909, § 1(e), Pub. L. No. 60-349, 35 Stat. 1075 (current version at 17 U.S.C.A. § 106 (West 1996 & Supp. 1998)).

[91] *Id.* at 1076.

[92] KOHN ON MUSIC LICENSING, *supra* note 17, at 657.

[93] *Id.* at 658.

[94] *Id.*

[95] *Id.*

[96] "[W]ell-known civil libertarians [insisted] that an author must not be allowed to prevent the public performance of his work." Thomas C. Brennan, *Some Observations on the Revision of the Copyright Law From the Legislative Point of View,* 24 BULL. COPYRIGHT SOC'Y 151, 152 (1976).

[97] 17 U.S.C.A. § 114 (West Supp. 1998).

[98] *Id.* § 114(b).

[99] *Id.*

[100] 17 U.S.C.A. § 115 (West Supp. 1998). For example, Paul McCartney's composition *Yesterday* has been recorded some 2,200 times in separate sound recordings. *See* Teachout, *supra* note 83, at 119.

[101] 17 U.S.C.A. § 115(c)(2).

[102] *Id.* § 115(b)(1).

[103] Musical Instrument Digital Interface.

[104] KOHN ON MUSIC LICENSING, *supra* note 17, at 6 (Supp. 1997).

[105] *Id.* at 7.

[106] 17 U.S.C.A. § 106 (West 1996 & Supp. 1998).

[107] 17 U.S.C.A. § 115 (West Supp. 1998).

[108] 96 F.3d 60, 40 U.S.P.Q.2d (BNA) 1052 (2d Cir. 1996).

[109] "CD + G" means "compact disc plus graphics." *Id.* at 62, 40 U.S.P.Q.2d at 1053-54.

[110] *Id.* at 65, 40 U.S.P.Q.2d at 1056.

[111] *Id.* In Japanese, the term "karaoke" means "empty orchestra." *Id.* at 62 n.3, 40 U.S.P.Q.2d at 1054 n.3.

[112] *Id.* at 62, 40 U.S.P.Q.2d at 1054.

[113] *Id.*

[114] *Id.* at 64, 40 U.S.P.Q.2d at 1055.

[115] *Id.* at 66, 40 U.S.P.Q.2d at 1057. One of the songs involved was *Satisfaction (I Can't Get No),* the classic rock song by the Rolling Stones. *Id.* at 62, 40 U.S.P.Q.2d at 1053. It would seem, however, that its publisher should be "satisfied" by the ruling.

[116] *Id.* at 62, 40 U.S.P.Q.2d at 1053.

[117] Tomlinson, *Digital Domain, supra* note 8, at 63-67.

[118] JOSEPH STRAUBHAAR & ROBERT LAROSE, COMMUNICATIONS MEDIA IN THE INFORMATION SOCIETY 22 (1996).

[119] Tomlinson, *Digital Domain, supra* note 8, at 61.

[120] *See, e.g.,* ITHIEL DE SOLA POOL, TECHNOLOGIES OF FREEDOM 7 (1983) ("[T]he law has rested on a perception of technology that is sometimes accurate, often inaccurate, and which changes slowly as technology changes fast.").

[121] Tomlinson, *Digital Domain, supra* note 8, at 61.

[122] "Copyright law has always depended on balancing the rights of users and creators … . This balance depends upon assumptions about the ease and availability of copying technology…. The Internet with its ability to make unlimited numbers of perfect digital copies has dramatically upset this balance." Mark F. Radcliffe, *Multimedia in 1997: Protecting Your Client's Legal and Business Interests; Multimedia in the Digital World,* 467 PATENTS, COPYRIGHTS, TRADEMARKS, & LITERARY PROP. COURSE HANDBOOK SERIES (PLI) 9, 11, Jan. 1997.

[123] *See generally* Andrew Hartman, *Don't Worry, Be Happy! Music Performance and Distribution on the Internet is Protected After the Digital Performance Rights in Sound Recordings Act of 1995,* 7 DEPAUL-LCA J. ART & ENT. L. 37 (1996).

[124] *Id.* at 37.

[125] RAYMOND T. NIMMER, INFORMATION LAW §§ 7.07-.08 (1996).

[126] *See* Harold M. White, Jr. & Rita Lauria, *The Impact of New Communications Technologies on International Telecommunication Law and Policy: Cyberspace and the Restructuring of the International Telecommunication Union,* 32 CAL. W. L. REV. 1, 1-2 (1995).

[127] *See, e.g.,* Neal Stephenson, *Mother Earth Mother Board,* WIRED, Dec. 1996, at 97, 98-99.

[128] *See generally* Heather Millar, *Rockets for the Rest of Us; Who Says a Satellite Program Can't be a Garage Start-up,* WIRED, Sept. 1996, at 102.

[129] William B. Scott, *Multimedia Satcom Competition Intensifies,* AVIATION WK. & SPACE TECH., April 13, 1998, at 72, 74 (quoting Russell Daggatt, president of Teledesic).

[130] *See* Lucien Rhodes, *The Race for More Bandwidth,* WIRED, Jan. 1996, at 140, 140-42.

[131] Bradford C. Auerbach, *Multimedia and the Law 1996: Protecting Your Clients' Interests; The Infobahn: Who Pays What?,* 428 PATENTS, COPYRIGHTS, TRADEMARKS & LITERARY PROP. COURSE HANDBOOK SERIES (PLI) 7, 9 (1996).

[132] *See generally* Stephenson, *supra* note 127.

[133] International Telecomm. Union, *ITU Releases New Study on Regulatory Implications of Trade Agreements on Telecommunications; Feb. 5, 1996* (visited Apr. 2, 1998) <http://www.itu.int/newsroom/press/releases/1996/itu-04.html>.

[134] KOHN ON MUSIC LICENSING, *supra* note 17, at 300-01.

[135] *Id.*

[136] *Id.* at 302-03.

[137] *See* Kunzru, *supra* note 41, at 196, 198, 200, 202.

[138] *See* NIMMER, *supra* note 125, §§ 4.23-.25 (discussing choice of law concerns with various forms of infringement).

[139] *See* 1 PAUL EDWARD GELLER & MELVILLE B. NIMMER, INTERNATIONAL COPYRIGHT LAW AND PRACTICE § 2[3] (1988 & Supp. 1997).

[140] *See generally* Sidney A. Rosenzweig, Comment, *Don't Put My Article Online! Extending Copyright's New-Use Doctrine to the Electronic Publishing Media and Beyond,* 143 U. PA. L. REV. 899 (1995); Kim L. Milone, Comment, *Dithering Over Digitization: International Copyright and Licensing Agreements Between Museums, Artists, and New Media Publishers,* 5 IND. INT'L & COMP. L. REV. 393 (1995).

[141] *See generally* Marshall Leaffer, *Protecting Authors' Rights in a Digital Age,* 27 U. TOL. L. REV. 1 (1995).

[142] Radcliffe, *supra* note 122, at 32.

[143] *Id.*

[144] *Id.*

[145] *See, e.g.,* Rooney v. Columbia Pictures Indus., Inc., 538 F. Supp. 211 (S.D.N.Y. 1982), *aff'd,* 714 F.2d 117 (2d Cir. 1982).

[146] KOHN ON MUSIC LICENSING, *supra* note 17, at 833.

[147] *Id.* at 834-35.

[148] *Id.*

[149] *Id.* at 838.

[150] *Rooney,* 538 F. Supp. at 212-13.

[151] *Id.* at 230.

[152] 942 F. Supp. 225, 40 U.S.P.Q.2d (BNA) 1819 (D.N.J. 1996).

[153] *Id.* at 227, 40 U.S.P.Q.2d at 1820.

[154] *Id.,* 40 U.S.P.Q.2d at 1820-21.

[155] *Id.* at 227, 233, 40 U.S.P.Q.2d at 1820, 1826.

[156] Milone, *supra* note 140, at 415-16.

[157] *Id.* at 416.

[158] Tomlinson, *Everything That Glitters, supra* note 65, at 171-72.

[159] For a general discussion of the use of alternative dispute resolution in such situations, see generally E. Casey Lide, Note and Comment, *ADR and Cyberspace: The Role of Alternative Dispute Resolution in Online Commerce, Intellectual Property and Defamation,* 12 OHIO ST. J. ON DISP. RESOL. 193 (1996); Miriam R. Arfin, *The Benefits of Alternative Dispute Resolution in Intellectual Property Disputes,* 17 HASTINGS COMM. & ENT. L.J. 893 (1995).

[160] John C. Yates & Michael R. Greenlee, *Intellectual Property on the Internet: Balance of Interests Between the Cybernauts and the Bureaucrats,* J. PROPRIETARY RTS., July 1996, at 8, 13 (Vol. 8 No. 7). For later information on the project, see George H. Friedman, *Alternative Dispute Resolution and Emerging Online Technologies: Challenges and Opportunities,* 19 HASTINGS COMM. & ENT. L.J. 695, 700-05 (1997).

[161] Yates and Greenlee, *supra* note 160, at 13.

[162] *See generally* Chandra Gehri Spencer, Comment, *Beware of the Highwayman on the Information Superhighway: A Balanced Proposal to Protect Copyrights Within the National Information Infrastructure,* 24 PEPP. L. REV. 121 (1996).

[163] *See generally* Andrew Chin, *Making the World Wide Web Safe for Democracy: A Medium-Specific First Amendment Analysis,* 19 HASTINGS COMM. & ENT. L.J. 309 (1997); Michael Johns, Comment, *The First Amendment and Cyberspace: Trying to Teach Old Doctrines New Tricks,* 64 U. CIN. L. REV. 1383 (1996); Lawrence Lessig, *The Path of Cyberlaw,* 104 YALE L.J. 1743 (1995).

[164] Religious Tech. Ctr. v. Netcom Online Communication Servs., Inc., 907 F. Supp. 1361, 1383, 37 U.S.P.Q.2d (BNA) 1545, 1562 (N.D. Cal. 1995).

[165] *Id.* at 1377, 37 U.S.P.Q.2d at 1557.

[166] *Id.,* 37 U.S.P.Q.2d at 1558.

[167] *Id.* at 1379 n.26, 37 U.S.P.Q.2d at 1559 n.26.

[168] Peter Brown, *16th Annual Institute on Computer Law: Understanding the Business and Legal Aspects of the Internet; Strategies for Securing Rights in Multimedia and Internet Products,* 430 PATENTS, COPYRIGHTS, TRADEMARKS, & LITERARY PROP. COURSE HANDBOOK SERIES (PLI) 93, 106-8, Mar. 1996.

[169] *Id.* at 106-07.

[170] *Id.* at 107.

[171] *Id.* at 107-08.

[172] *See, e.g.,* Carolina Saez, *Enforcing Copyrights in the Age of Multimedia,* 21 RUTGERS COMPUTER & TECH. L.J. 351, 357 (1995).

[173] *Id.*

[174] *Id.*

[175] *See* Gilliam v. American Broad. Co., 538 F.2d 14, 24-25, 192 U.S.P.Q. (BNA) 1, 8-9 (2d Cir. 1976). Section 43(a) of the Lanham Act is 15 U.S.C. § 1125(a) (1994).

[176] Saez, *supra* note 172, at 380.

[177] *Id.*

[178] *Id.* at 381.

[179] *See generally* Segal, *supra* note 42; Kenneth D. Suzan, Comment, *Tapping to the Beat of a Digital Drummer: Fine Tuning U.S. Copyright Law for Music Distribution on the Internet,* 59 ALB. L. REV. 789 (1995).

[180] *French Student Infringed Reproduction and Performance Rights of Art Music and Warner Chappell France by Digitizing Musical Works by Michel Sardou and Posting Them on Student's Web Page on His School's Internet Server, Paris Court; Rules,* ENT. L. REP., July 1997, at 4, 4-5 (Vol. 19 No. 2) (reporting on Art Music France v. L'Ecole Nationale Superieure Des Telecommunications, Tribunaux de grande instance [district court] Paris, [1997] EEC 97 [ELR 19:2:4]).

[181] *Id.* at 4.

[182] *Id.*

[183] *Id.* at 4-5.

[184] *Id.* at 5.

[185] *Id.*

[186] *See* Alan R. Grogan, *Implied Licensing Issues in the Online World,* COMPUTER LAW., Aug. 1997, at 1, 1 (1997) (Vol. 14 No. 8).

187 *Id.* at 2.

188 *Id.*

189 At least that result would seem to be the case. Current proposals to amend the Copyright Act would place such "transmissions" under the distribution right. *See e.g., Bill Summary and Status* (visited Apr. 7, 1998) < http:// thomas.loc.gov/cgi-bin/bdquery/z?d105:h.r.03048:> (regarding the H.R. 3048 Digital Era Copyright Enhancement Act). For other pending copyright legislation, see U.S. Copyright Office, Library of Congress, *Pending Copyright Legislation, 105th Congress* (last modified Mar. 11, 1998) <http:// lcweb.loc.gov/copyright/penleg.html>.

190 Grogan, *supra* note 186, at 2.

191 *Id.* (citing Allen-Myland v. International Bus. Machs. Corp., 746 F. Supp. 520, 549, 16 U.S.P.Q.2d (BNA) 1817, 1839 (E.D. Pa. 1990)).

192 *See* KOHN ON MUSIC LICENSING, *supra* note 17, at 143-82 (Supp. 1997) (settlement agreement between CompuServe Inc. and Frank Music Corporation).

193 *See* Segal, *supra* note 42, at 100.

194 *See* 5 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 24.02[A] (1978 & Supp. 1997) [hereinafter NIMMER ON COPYRIGHT].

195 4 *Id.* § 13.01.

196 17 U.S.C.A. § 106 (West 1996 & Supp. 1998).

197 *See, e.g.,* EMI Music Publishing Online, *Why Register?* (last modified Feb. 18, 1998) <http://www.emimusicpub.com/public/news/whyreg.htm>. The site introduces the service available through EMI and explains: "If you license songs, edit or re-score film, supervise or clear soundtracks, use music in commercials, TV, video, stage plays, CD-ROMs, interactive projects, karaoke, MIDI, book publishing, merchandising or business presentations, this is the site for you to both carry out research and process sync license requests." *Id.*

198 *See, e.g., The Incredibly Small Concert Hall* (visited Mar. 29, 1998) < http://www.smallhall.com/> [hereinafter *Incredibly Small*].

199 *See* JRE, *JRE Entertainment Group-Catalogue* (last modified Feb. 21, 1998) <http://www.johnnyrock.com/catalog.html>. Bands represented on the site include Diesel Opera, the Majenta Jets, Ten Foot Alice, and Wishbone.

200 *Id.*

201 *Id.*

202 *Incredibly Small, supra* note 198. After entering the hall by clicking on the doorway, the reader sees a page which explains that the Incredibly Small Concert Hall is a
business organization for composers of original music. Our members have gathered here for two reasons. One, so you can hear their music, probably for the first time. Second, so you can buy it. We encourage you to do that. These artists have taken on the

expense of recording their own albums to get their music into the world. You should support that!
The Incredibly Small Concert Hall, *ISCH Main Hallway* (visited Apr. 7, 1998) < http://www.smallhall.com/mhall.html>.

203 Andrew Serwer & Liz Smith, *That Groovin' Web Sound!; N2K Thinks It'll Rule Online Music Retailing. Investors Herb Allen, Wayne Huizenga, and Paul Allen Agree* (last modified Jan. 12, 1998) <http:// www.pathfinder.com/fortune/digitalwatch/0112fil3.html> (a FORTUNE magazine on-line article).

204 *Id.*

205 *Id.*

206 *Id.*

207 *Id.*

208 Brent Schlender, *Pet Sounds: Building Your Own Music CD* (Mar. 30, 1998) <http://www.pathfinder.com/fortune/digitalwatch/0330fil4.html> (describing Musicmaker, *Welcome to Musicmaker* (visited Apr. 21, 1998) <http:// www.musicmaker.com/>).

209 *See id.*

210 *See, e.g.,* Audionet, *Audionet: Jukebox* (visited Mar. 29, 1998) < http:// www.audionet.com>; Netradio, *Netradio Network* (visited Mar. 29, 1998) < http:// www.netradio.com>; Mediadome, *Mediadome-Welcome to the Mediadome* (visited Apr. 3, 1998) <http://www.mediadome.com/>; Jazz Online, *Welcome to Jazz Online* (visited Mar. 29, 1998) <http://www.jazzonline.com>.

211 BMI, *BMI Media Licensing-Web* (visited Mar. 29, 1998) <http:// www.bmi.com/licensing/web.html>.

212 ASCAP, *ASCAP Internet Licensing* (visited Mar. 29, 1998) <http:// www.ascap.com/weblicense/webfaq.html>.

213 The document containing this language is located in Adobe Acrobat®)) format at <http://www.ascap.com/weblicense/ascap.pdf> (visited Mar. 29, 1998).

214 *See* Toshio Aritake, *Japanese Performers' Rights Society Seeks Fees for Internet Music Broadcast,* 2 Electronic Info. Pol'y & L. Rep. (BNA) 89, 89 (Jan. 17, 1997).

215 *Id.*

216 *Id.*

217 *Id.*

218 Frank Music v. CompuServe, Inc., No. 93 Civ. 8153 (S.D.N.Y. 1995) (settled 1995).

219 *See* Joseph V. Myers III, Note, *Speaking Frankly About Copyright Infringement on Computer Bulletin Boards: Lessons to be*

Learned from Frank Music, Netcom, and the White Paper, 49 VAND. L. REV. 439, 471, 477-80 (1996).

220 Brown, *supra* note 168, at 100-01.

221 *Id.* at 101.

222 *Id.*

223 *Id.* Because it was settled before trial, the case has no precedential value in the reported opinion sense; however, given the nature and wide dissemination of the terms of the settlement agreement, the case does have "precedential" value in the sense that it will affect, and likely already has affected, behavior by third parties in cyberspace.

224 *Id.*

225 *Id.* at 101-02.

226 *Id.* at 102.

227 *Id.*

228 *See* KOHN ON MUSIC LICENSING, *supra* note 17, at 164 (Supp. 1997) (November 7, 1995 settlement agreement between CompuServe Inc. and Frank Music Corporation).

229 *Id.*

230 *Id.* at 166.

231 *Id.* at 167.

232 *Id.* (citing 17 U.S.C.A. § 115 (West 1996 & Supp. 1998))

233 *Id.* at 164.

234 *Id.* at 167.

235 *Id.* at 168.

236 *Id.* at 169.

237 *Id.* at 167.

[238] *Id.* at 164.

[239] *Id.* at 164-66.

[240] *See generally* Nicholas W. Allard & David A. Kass, *Law and Order in Cyberspace: Washington Report,* 19 HASTINGS COMM. & ENT L.J. 563 (1997).

[241] *See* President William J. Clinton & Vice President Albert Gore, Jr., *A Framework for Global Electronic Commerce* (visited Apr. 2, 1998) <http:// www.iitf.nist.gov/eleccomm/ecomm.htm> [hereinafter Framework].

[242] *See* Mary V. Fisher & Roger K. Mizumori, *Part Two: Electronic Commerce and the Global Directory,* EC.COM MAG., Oct. 1997, at 39, 39 [[[hereinafter Fisher].

[243] *Cf.* Craig Harding, *Multimedia and the Law 1996: Protecting Your Clients' Interests; On-line Distribution of Multimedia Products,* 428 PATENTS, COPYRIGHTS, TRADEMARKS, & LITERARY PROP. COURSE HANDBOOK SERIES (PLI) 425, 427, Jan. 1996.

[244] *See* Fisher, *supra* note 242, at 39. A variety of electronic commerce applications are now being explored, including permutations of electronic data interchange.

[245] *Cf.* Tim Clark, *E-commerce Targets Individuals* (Mar. 17, 1997) < http:// www.news.com/News/Item/0,4,8876,00.html> (describing two software packages which help merchants with on-line promotion).

[246] *See The Web Gets Down to Business; Introduction* (visited Apr. 21, 1998) <http://www.pathfinder.com/offers/ecommerce/ecintro.html> (a special advertising section of FORTUNE magazine on-line) [hereinafter *Web Gets Down to Business]*. *Time Warner's Pathfinder* (visited Apr. 21, 1998) <http:// www.pathfinder.com/welcome/> is a Web site of Time Warner.

[247] *Web Gets Down to Business, supra* note 246.

[248] *Id.*

[249] *See* Framework, *supra* note 241, Background, para. 4.

[250] *Id.*

[251] *Id.,* Background, paras. 4, 6.

[252] *See id.*

[253] *Id.*

[254] *Id.; see WebTV-Home* (visited Apr. 3, 1998) <http:// www.webtv.com>; *see also* Jim Davis, *PowerPC for the People* (Aug. 28, 1996) < http:// www.news.com/News/Item/0,4,2334,00.html>. The Davis article reports on a "new low-cost PowerPC microprocessor aimed at consumer and general-purpose applications" which will combine a "PowerPC RISC processor running at

25 MHz with integrated support for serial connections to modem, video, audio, and TV monitor interfaces." *Id.* The concept is designed to form "communications-centric" general-purpose products. *Id.*

255 *See generally* Holly Keesling Towle, *Advanced Seminar on Drafting Licensing Agreements: Licensing and the Uniform Commercial Code,* 473 PATENTS, COPYRIGHTS, TRADEMARKS, & LITERARY PROP. COURSE HANDBOOK SERIES (PLI) 147, Mar. 1997.

256 *See* Courtney Macavinta, *Congress Shapes High-tech, Net Policy* (Dec. 2, 1997) <http://www.news.com/SpecialFeatures/0,5,16823,00.html>.

257 *See* Towle, *supra* note 255, at 152-57.

258 *Id.*

259 *See* Framework, *supra* note 241, Issues, parts I.2, II.3.

260 *See* Reuters, *Reports of EDI's Death Exaggerated* (Apr. 2, 1998) < http:// www.news.com/News/Item/0,4,20700,00.html> [hereinafter Reuters].

261 *Id.*

262 *Cf.* Tim Clark, *For e-commerce, All Systems Go* (Dec. 30, 1996) < http:// www.news.com/News/Item/0,4,6553,00.html> [hereinafter Clark, Dec. 1996].

263 *Id.*

264 *Id.*

265 *Id.*

266 *See also* Visa International, *New Technologies* (visited Apr. 3, 1998) < http://www.visa.com/cgi-bin/vee/nt/main.html?2+0>.

267 *See generally* Clark, Dec. 1996, *supra* note 262.

268 *Id.*

269 Tim Clark, *Actra Ships e-commerce Software* (Oct. 27, 1997) <http:// www.news.com/News/Item/0,4,15718,00.html>.

270 *Id.*

271 *Id.*

272 *Id.*

[273] *See* KOHN ON MUSIC LICENSING, *supra* note 17, at 143-82 (Supp. 1997) (settlement agreement between CompuServe Inc. and Frank Music Corporation).

[274] *See* Technology Overview, *supra* note 20.

[275] The Digital Performance Right in Sound Recordings Act of 1995, 17 U.S.C.A. § 106(6) (West 1996 & Supp. 1998).

[276] Brown, *supra* note 168, at 103.

[277] *Id.*

[278] *Id.* at 104.

[279] *See generally* Rebecca F. Martin, Note, *The Digital Performance Right in Sound Recordings Act of 1995: Can it Protect U.S. Sound Recording Copyright Owners in a Global Market?,* 14 CARDOZO ARTS & ENT. L.J. 733 (1996).

[280] *See generally* Megan M. Wallace, Comment, *The Development and Impact of the Digital Performance Right in Sound Recordings Act of 1995,* 14 T.M. COOLEY L. REV. 97 (1997); Julie Arthur Garcia, *An Analysis of the Digital Performance Rights in Sound Recordings Act of 1995,* J. PROPRIETARY RTS., February 1996, at 13 (Vol. 8 No. 2).

[281] Garcia, *supra* note 280, at 13.

[282] *Id.*

[283] *Id.*

[284] *Id.*

[285] 17 U.S.C.A. § 114(j)(7) (West 1996 & Supp. 1998).

[286] *Id.*

[287] *See* Garcia, *supra* note 280, at 14.

[288] *Id.*

[289] *Id.*

[290] *Id.*

[291] 17 U.S.C.A. § 114(j)(4) (West 1996 & Supp. 1998).

[292] Garcia, *supra* note 280, at 14.

[293] *See* Segal, *supra* note 42, at 104-05.

[294] Hartman, *supra* note 123, at 67.

[295] *Id.*

[296] *Id.* at 68.

[297] The letters no longer represent relevant words. Tomlinson, *Everything that Glitters, supra* note 65, at 123 n.106.

[298] Hartman, *supra* note 123, at 66-68.

[299] DON E. TOMLINSON, COMPUTER MANIPULATION AND CREATION OF IMAGES AND SOUNDS: ASSESSING THE IMPACT, 34-40 (1993) [hereinafter COMPUTER MANIPULATION] (published by The Annenberg Washington Program in Communications Policy Studies of Northwestern University).

[300] *Id.*

[301] *Id.*

[302] *Id.*

[303] 780 F. Supp. 182, 22 U.S.P.Q.2d (BNA) 1556 (S.D.N.Y. 1991).

[304] COMPUTER MANIPULATION, *supra* note 299, at 40.

[305] *Id.* at 34-35.

[306] 780 F. Supp. at 184, 22 U.S.P.Q.2d at 1557.

[307] *Id.* at 185, 22 U.S.P.Q.2d at 1558.

[308] *Id.,* 22 U.S.P.Q.2d at 1558.

[309] KOHN & KOHN, *supra* note 61, at 815-26.

[310] *See System to Identify Digital Objects Can Link Users to Rights Holders,* 11 World Intell. Prop. Rep. (BNA) 381, 381 (Nov. 1997).

311 *Id.*

312 *Id.*

313 *Id.*

314 *Id.*

315 *Id.*

316 *Id.*

317 *Id.*

318 *Id.*

319 *See Introduction to the Digital Object Identifier* (visited Mar. 28, 1998) <http://www.doi.org/introduction.html>.

320 *See The DOI Gallery* (last modified Oct. 15, 1997) <http:// www.doi.org/gallery/tour.html>.

321 *See Introduction to the Digital Object Identifier, supra* note 319.

322 WIPO Copyright Treaty, *adopted* Dec. 20, 1996, S. TREATY DOC. NO. 105-17 (1997), 36 I.L.M. 65 [hereinafter WIPO Copyright Treaty].

323 *See* Article 12 of the WIPO Copyright Treaty, which provides:
Obligations concerning Rights Management Information
(1) Contracting Parties shall provide adequate and effective legal remedies against any person knowingly performing any of the following acts knowing, or with respect to civil remedies having reasonable grounds to know, that it will induce, enable, facilitate or conceal an infringement of any right covered by this Treaty or the Berne Convention:
(i) to remove or alter any electronic rights management information without authority;
(ii) to distribute, import for distribution, broadcast or communicate to the public, without authority, works or copies of works knowing that electronic rights management information has been removed or altered without authority.
(2) As used in this Article, "rights management information" means information which identifies the work, the author of the work, the owner of any right in the work, or information about the terms and conditions of use of the work, and any numbers or codes that represent such information, when any of these items of information is attached to a copy of a work or appears in connection with the communication of a work to the public
Id., art. 12, S. TREATY DOC. NO. 105-17 at 11, 36 I.L.M. at 71 (footnote omitted).

324 *Id.*

325 H.R. 2281, 105th Cong. sec. 3 (1997) (adding Chapter 12, §§ 1201-1204 to Title 17 of the United States Code).

326 *Id.*

327 *Id.*

328 *See generally* WIPO Copyright Treaty, *supra* note 322.

329 *See International Agreement on Internet Licensing Framework for Musical Works* (visited Mar. 28, 1998) <http://www.nmpa.org/pr/inetlicense>. Participants included GEMA (Germany), SACEM/SDRM (France), and NMPA/HFA (United States). *Id.*

330 *Id.*

331 *Id.*

332 *See* InterTrust Technologies Corporation (visited Apr. 6, 1998) < http:// www.intertrust.com/>.

333 *Id.*

334 *Id.*

335 *Id.*

336 *Id.*

337 *Id.*

338 *Id.*

339 *Id.*

340 *Id.*

341 *See, e.g.,* Technology Overview, *supra* note 20 (information concerning the DigiBox).

342 *Id.*

343 *See generally* Barbara Cohen, Note, *A Proposed Regime for Copyright Protection on the Internet,* 22 BROOK. J. INT'L. L. 401 (1996); Jennifer D. Choe, Note, *Interactive Multimedia: A New Technology Tests the Limits of Copyright Law,* 46 RUTGERS L. REV. 929 (1994); Paul Goldstein, *Copyright in the New Information Age,* 40 CATH. U. L. REV. 829 (1991); Pamela Samuelson, *Digital Media and the Changing Face of Intellectual Property Law,* 16 RUTGERS COMPUTER & TECH. L.J. 323 (1990).

344 Tomlinson, *Digital Domain, supra* note 8, at 70. *See also* Jenny L. Dixon, Note, *The Copyright Term Extension Act: Is Life Plus*

Seventy Too Much?, 18 HASTINGS COMM. & ENT. L.J. 945, 948, 976-80 (1996) (concluding that the proposal to extend the life of a copyright is not within U.S. copyright tradition).

345 U.S. CONST. art. I, § 8, cl. 8.

346 Act of May 31, 1790, ch. XV, § 1, 1 Stat. 124 (repealed 1831).

347 Statute of Anne, 8 Anne, C. 19 (1710), *reprinted in* 8 NIMMER ON COPYRIGHT, *supra* note 194, app. 7[A], at 7-5 to 7-10.

348 17 U.S.C. § 24 (1909) (current version at 17 U.S.C. § 302(a) (1994)).

349 17 U.S.C. § 302(a).

350 Tomlinson, *Digital Domain, supra* note 8, at 70.

351 Professor Tomlinson wishes to add the following anecdote concerning the apparent ease of suggesting paradigm revolution and the apparent difficulty of bringing it about.
I was making a talk on privacy and the Internet at the ABA convention in Chicago a few years ago when I had occasion to discuss copyright paradigm revolution with a noted academic who told me he had been seriously studying this specific issue for ten years. Astounded, I asked him what he had come up with. His answer? Nothing, but that he intended to keep thinking.