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[By Matthew S. Garnett*]

The digital sampling controversy is "the student author's favorite dead horse."[1] Over the past decade, more than 100 legal articles, commentaries and student notes have dealt with digital sampling and its relation to copyright law.[2] In addition, the various constituencies in the music industry, such as artists, composers, producers, and recording executives, have also trumpeted their perspectives.[3] In general, the viewpoints expressed by interested parties reflect "whose ox is being gored."[4] Until the landmark ruling by the Sixth Circuit in *Bridgeport Music, Inc. v. Dimension Films*, however, neither the courts nor Congress[5] had directly addressed an essential question in the digital sampling debate: to what extent, if any, may an artist digitally sample another's work without infringing the *sound recording's* copyright?[6]

The *Bridgeport Music* court responded with an iron gavel: "Get a license or do not sample."[7] The court interpreted §114(b) of the Copyright Act of 1976 ("Copyright Act") to prohibit any unauthorized sampling where "the actual sounds [in the original] recording are rearranged, remixed, or otherwise altered in sequence or quality."[8] Consequently, the defensive tools of copyright infringement, such as substantial similarity and *de minimis* tests, are unavailable to even the most quantitatively trifling or qualitatively transformative sample.[9] No matter if one samples 20 seconds or 20 milliseconds, and irrespective of how one slices, loops, filters, layers, or stretches a sample, the Sixth Circuit has adopted the Biblical attitude expressed in *Grand Upright Music, Ltd. v. Warner Bros. Records, Inc.*, ("*Grand Upright*"), the prime

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mover in the digital sampling debate: "Thou shalt not steal."[10]

Notwithstanding the *Bridgeport Music* decision, the text of §102(b) of the Copyright Act plainly prohibits the extension of copyright protection "to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is... embodied."[11] This Note argues that the bright-line rule announced in *Bridgeport Music* should not apply where the disputed digital sample appropriates only the "sonic" ideas of the original work. The main thrust of this argument is that the Sixth Circuit's holding in *Bridgeport Music* is inapplicable where the disputed copying is a protected exercise of "fair use" reverse engineering; that is, where copying is necessary to appropriate the "sonic" ideas embodied in the sampled work.

Part II of this Note presents a brief history of digital sampling, including its application in the Hip-Hop musical genre. Part III presents a walkthrough of the *Bridgeport Music* decision, including its procedural history, the lower court's decision, and the Sixth Circuit's recent amendment of its own opinion. Part IV presents an analysis of *Bridgeport Music*, including reference to the recent eruption of academic and public reaction to the case. Part V sets aside the bulk of prior digital sampling scholarship to open a new front in the debate: the "Electronica" musical genre, the "Downhill Battle" protesters, and the innovative applications of digital sampling common to Electronica Music. Part VI argues that certain uses of digital sampling in Electronica composition are protectable acts of reverse engineering, and therefore immune from the Sixth Circuit's "Get a license or do not sample" missive.[12] Part VII concludes that, while the result in *Bridgeport Music* is probably justified, its moratorium on all unlicensed sampling is an improvident attempt to copyright uncopyrightable "sonic" ideas.

I. A Brief (and Incomplete) History of Sampling

A. The Life and Times of Digital Sampling

Sampling is the act of taking "sounds" from of a previous recording and placing them in a new musical work.[13] In the context of digital sampling, "digital" refers to a set of binary numbers representing an audio waveform.[14] These "numbers" are determined through the repeated measurements of the fluctuating electrical currents, or analog electrical signals, commonly known as sounds.[15] Because it is impossible to listen to numbers directly, every sampling system has both an Analog to Digital Converter ("ADC") and a Digital to Analog Converter ("DAC").[16] The ADC converts the electrical voltage of sounds into numbers, and the DAC converts the numbers back into voltages that can be output through audio speakers.[17] Digital sampling, therefore, has three discrete stages: (1) recording the "sonic" numbers in the sample; (2) editing (or not editing) the sample with digital audio devices; and (3) playing back the modified (or unmodified) sample.

In 1979 the first digital sampler hit the commercial market: The Fairlight CMI (Computer Music Instrument).[18] At a cost around $30,000, the Fairlight CMI was "dubbed" practical, and its early champions included Stevie Wonder and Peter Gabriel.[19] A popular application of early digital sampling systems was to record and playback "real" instrumental sounds (e.g. individual recordings of notes of brass instruments, grand pianos etc.).[20] Limitations in computer memory, the high costs of processors, and compatibility problems between different manufacturers of samplers, synthesizers, and other digital audio devices made this practice almost inevitable.[21]

The existing compatibility problems were solved in 1983 when industry-wide cooperation produced the Musical Instrument Digital Interface ("MIDI").[22] MIDI allowed digital samplers, synthesizers and sequencers produced by different manufacturers to communicate seamlessly.[23] As the 1980's progressed, moreover, rapid advances in digital and computer technology, coupled with the increased affordability of computer memory and processors, worked to release the creative harness on digital sampling.[24] For instance, technological developments allowed a sampling artist to isolate sounds from a particular instrument on a recording, such as a single note from a Miles Davis trumpet performance or a John Bonham drum "kick," and then digitally alter its sonic

characteristics to form, respectively, either an elaborate jazz solo or an entire percussion ensemble.[25]

Today, synthesizers, effects processors, sequencers and drum machines all work alongside the digital sampler, and are often bundled into software packages for personal computers. Deep-pocketed musicians and recording studios no longer represent the exclusive market for sampling systems. Software products such as "Gigastudio 160," "Cubase SX," and "Reaktor 4" incorporate all the constituents of a professional recording studio, and each product is available for less than five-hundred dollars.[26] The result is that any person with a microphone, a computer, and either a substantial compact disc collection or access to the Internet, can produce commercial rap music.[27] The functionality and affordability of digital audio equipment is therefore bereft with both benefit and liability: a society of potential recording artists, but also a society of potential digital sampling bandits.

{ "... any person with a microphone, a computer, and either a substantial compact disc collection or access to the Internet, can produce commercial rap music." }

B. Digital Sampling in the Hip-Hop Musical Genre

1. The Hip-Hop Turn-table Dee-Jay: From the South Bronx to Studio Extinction

The first musical sampling (which was not digital) is generally credited to Jamaican disc-jockeys in the 1960's that would, through the use of phonograph turn-tables, combine the sounds of previous recordings to create a variety of original rhythms and arrangements.[28] In the early 1970's, the United States was introduced to sampling by Jamaican expatriate Dee-Jay Kool Herc, who brought his manually spliced "funk" beats to street corners and recreation centers in the South Bronx (New York City).[29] This musical fashion quickly evolved into the musical and cultural revolution known as "hip-hop."[30]

Throughout the mid-1970's and early 1980's, disc jockeys became increasingly creative in their use of turn-tables. For example, they experimented with a record's playback speed, they "looped" rhythm arrangements of a song by mixing two copies of the same record, and they "scratched" one or more records to create unique rhythmic and arguably cacophonous sounds.[31] Given that these techniques often involved prodigious manual dexterity, it is hardly surprising that many disc jockeys viewed themselves as musicians and their turn-tables as musical instruments.

With the advent of digital sampling and rapid technological advances in the early 1980's, however, hip-hop producers discovered they could easily recreate a disc-jockey's performance with the digital sampler, often using the sampler in conjunction with other emerging digital audio equipment.[32] Despite a traditional disc-jockey's ability to dazzle audiences with his craftsmanship at the turn-table (and his continued relevance as a performing artist), he nevertheless faced extinction in the music studio.[33]

2. Hip-Hop Sampling as Cultural Communication, Theft, or Both?

Commercial reality cannot be ignored. Sampling in hip-hop music is a breakthrough musical innovation, and also is credited as an important cultural communication device.[34]

Further, sampling is fairly described as a "mother of invention," given Hip-Hop's roots in economically depressed areas where aspiring artists could financially facilitate little more than "two turntables and microphone." Nonetheless, despite sampling's value as a nostalgic patchwork of musical and cultural expression, its proliferation raises the question: are Hip-Hop musicians thieves if they do not first obtain licenses from the copyrighted works they sample?[35] Or is digital sampling in the Hip-Hop musical genre merely the modern manifestation of "a time honored [and protected] practice [of borrowing in] all the creative arts?"[36]

Two different perspectives, amongst dozens that impregnate the digital sampling debate, come from two of Hip-Hop's most frequently sampled artists, George Clinton and James Brown. Clinton, a pioneer of the "funk" musical genre, is a member of an emerging school of recording artists who seek to encourage Hip-Hop musicians (who lack the resources to pay upfront licensing fees) to freely create in their pursuit of artistic and commercial success.[37] Towards this end, Clinton released two albums in 1992 called "Sample Some of Dis [sic]" and "Sample Some of Dat [sic]" in an effort to provide up-and-coming artists with samples they could use without immediate legal scrutiny.[38] On the other hand, Brown, affectionately known as the "Godfather of Soul," has exclaimed: "Anything they take off my record is mine. Is it [alright] if I take some paint off your house and put it on mine?"[39] Many musicians feel that because the Copyright Act does not require a copyright holder to grant a compulsory license to anyone, then short snippets of music, such as Brown's distinctive "grunts," should also exist outside the public domain.[40]

II. "Walk this Way" as We Run Through *Bridgeport Music*

A. Hip-Hop[ping] Into a Sound Recording Lawsuit

On May 4, 2001, plaintiffs Bridgeport Music, Inc. ("Bridgeport") and Westbound Records, Inc. ("Westbound") brought a copyright infringement action[41] against over 800 defendants, mostly record companies and other music publishing entities, that had distributed musical works that allegedly sampled, without authorization, portions of 476 George Clinton

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songs.[42] In August, 2001 the original complaint was severed into separate actions, including an action alleging that "gangsta" rap pioneers NWA, in their song "100 Miles and Runnin'," ("100 Miles") infringed Westbound's sound recording copyright in George Clinton's performance of "Get Off Your Ass and Jam" ("Get Off").[43]

Defendant No Limit Films ("No Limit"), a licensee of "100 Miles," distributed the song as part of the soundtrack to its movie release "I Got the Hook Up."[44] On June 21, 2002, No Limit filed a summary judgment motion in the Middle District of Tennessee claiming that Westbound's action for copyright infringement of "Get Off's" sound recording should be dismissed because "(1) the portion of "Get Off" that was copied was not original and therefore not protected by copyright law; [and] (2) the sample of "Get Off" [was] legally insubstantial and... [did] not amount to actionable copy-

ing."[45]

The parties did not dispute that "100 Miles" contained an edited two-second sample of the introduction to Clinton's "Get Off." "Get Off" begins with a three-note guitar riff on an unaccompanied electric guitar, and lasts for approximately four seconds. The three-note arpeggio is repeated several times, and the "rapidity of the notes and the way they are played produce a high-pitched, whirling sound that captures the listener's attention and creates anticipation of what is to follow."[46] In "100 Miles", a two-second portion of the riff is sampled, "looped," and then slowed down (resulting in a lowered pitch) to match the tempo and arrangement of the song.[47] The "looped" version of the sample lasts for approximately seven seconds and appears five times throughout the song.[48] Whereas in "Get Off" the unaccompanied riff produces "a rising sense of anticipation," its edited use in "100 Miles" "evokes the sound of police sirens" and is layered into the background of the song.[49]

B. "Get[ting] Off" the "Hook": The District Court's Opinion

1. The Originality Claim

Under the Copyright Act, only "original works of authorship" are entitled to copyright protection."[50] No Limit Films argued that because the three-note arpeggio sampled in "100 Miles" was "a commonly used collection of notes" it was unoriginal and a invalid basis for an infringement action.[51] In rejecting No Limit's challenge, the District Court noted that, in a sound recording infringement suit, it is "the aural effect produced by the way the notes in the ["Get Off" sample] are played" that are the subject of the originality inquiry, not the collection of notes themselves.[52] The District court concluded that No Limit's originality challenge failed because "a jury could reasonably conclude that the way the arpeggiated chord is used and memorialized... is original and creative."[53]

2. The "Legally Insubstantial" Claim

a. The Substantial Similarity Requirement

Not all copying is infringement.[54] In interpreting the Copyright Act[55], the District Court found that for Westbound to establish infringement of "Get Off's" sound recording copyright, it must demonstrate: (1) copyright ownership of "Get Off;" (2) that "100 Miles" actually sampled "Get Off;" and (3) that the sample amounted to an unlawful appropriation because its edited use in "100 Miles" was "substantially similar" to the original work.[56] Because copyright ownership and actual copying were not contested (for purposes of No Limit's motion), the District Court was charged with determining whether the use of "Get Off" in "100 Miles" "crossed the threshold of substantial similarity as to constitute actionable copying."[57]

b. If *De Minimis*, No Substantial Similarity

In its opinion, the District Court noted that when evaluating the "substantial similarity" prong of copyright infringement, the Sixth Circuit has recognized that "the law cares not for trifles," and that over-enforcement of copyright laws may unjustifiably stifle creativity.[58] In the view of the District Court in *Bridgeport Music*, then, a "trifling" or *de minimis* instance of copyright infringement was not legally actionable because it did not rise to the level of the substantial similarity required for actionable copying.[59]

c. "Get[ting] Off" the "Hook"

The District Court agreed with No Limit that the "Get Off" sample used in "100 Miles" was *de minimis*, and therefore not substantially similar to George Clinton's original recording.[60] It first compared the two works as a whole, distinguishing "Get Off" as a "celebratory song" about dancing, whereas NWA's "100 Miles" represented a fictional narrative about four men being pursued by the Federal Bureau of Investigation ("F.B.I.").[61] The District Court also found that "there [were] no similarities in mood or tone" between the edited "Get Off" sample used in "100 Miles" and its unedited use in the original Clinton recording.[62] It concluded that no jury, even one familiar with George Clinton's records, "would recognize the source of the ["Get Off"] sample without [being] told."[63] On this basis, the District Court granted No Limit's motion to dismiss and held that NWA's use of "Get Off" was *de minimis*, and therefore not the

proper subject of an infringement action.[64]

C. Back in the "Dead Horse's" Saddle: The Sixth Circuit Opinion

1. The Racing Grounds of Westbound's Appeal

Westbound, along with Bridgeport (appealing on a separate issue) filed its notice of appeal in the Sixth Circuit Court of Appeals on November 8, 2002.[65] In its brief, Westbound argued that the District Court committed reversible error on two points. First, Westbound argued that the District Court erroneously burdened it, and not Defendant No Limit, with establishing the substantial similarity element of infringement. Second, Westbound argued that the District Court's substantial similarity analysis was flawed because i compared the tone and feeling of the edited "Get Off" sample against its use in Clinton's original work instead of considering whether the "Get Off" sample used in "100 Miles" constituted a "substantial portion" of Clinton's work.[66] Westbound believed that "Get Off's" introductory three-note riff was a "signal moment" in the song and therefore a legally significant portion "because it [was] placed at the very beginning of the composition and... [was] entirely unaccompanied."[67] The Sixth Circuit's decision, filed on September 7, 2004, rejected these arguments; instead, it trotted through copyright law with a different cavalry of analysis.[68]

2. The Sixth Circuit Opinion

a. The Day the District Court Opinion Died

In one swift missive, the Sixth Circuit dismissed both the result reached and the legal reasoning used in the District Court's opinion: "[s]ince the district court decision... tracked the analysis that is made if a musical composition copyright were at issue, we depart from that analysis."[69] Digital sampling case law heretofore, from 1991's *Grand Upright* to the most recent 2003 case, *Newton v. Diamond* – cases that involved "composition copyright infringement [but] not sound recording infringement," played no role in the Sixth Circuit's opinion.[70]

b. Hip-Hop[ping] Back to "Thou Shalt Not Steal"

The Sixth Circuit, recognizing the "dearth of legal authority... and the importance of the resolution of this issue," announced that the "music industry, as well as the courts, [were] best served" by the declaration of a bright-line test to be used in resolving sound recording infringement claims.[71] The Sixth Circuit declared, "Get a license or do not sample."[72] Inquiries into *de minimis* infringement and substantial similarity simply do "not enter the equation" when the defendant does not dispute actual copying.[73] The effect of this commandment is that even the most quantitatively trifling or qualitatively transformative applications of digital sampling are each, absent appropriate licenses, instances of sound recording copyright infringement.[74] Also, the Sixth Circuit departed from the District Court's originality analysis and declared that the requirement "[was] met by the [mere] fixation of sounds in the master recording... because only... the master recording will be exactly the same as the copyrighted sound recorded."[75]

c. The Sixth Circuit's Justification of "Get a License or Do Not Sample"

The Sixth Circuit justified its landmark holding primarily through its interpretation of 17 U.S.C. §114(b) to prohibit any unauthorized sampling where "the actual sounds [in the original] recording are rearranged, remixed, or otherwise altered in sequence or quality."[76] In addition, the following factors bolstered its reasoning: (1) sampling is never accidental; (2) bright-line rules are easily enforced; and (3) the holding does not significantly stifle creativity because artists may negotiate appropriate licenses, or, in lieu of obtaining a license, independently recreate the desired sample.[77] The Sixth Circuit also explained why, in its view, substantial similarity and *de minimis* analysis were unavailable to a defendant that did not dispute actual copying.

Though the Sixth Circuit acknowledged it was not following any legal precedent, it explained that it also "did not pull this [holding] out of thin air."[78] The Sixth Circuit cited six different law journal articles, as well as other legal commentary, as secondary authority.[79] This legal academia supported, or in part provided,

the court's interpretation of 17 U.S.C. §114(b), and also bolstered its other justifications.[80] The "dead horse" legal authors in the digital sampling debate were apparently not quite dead.[81]

i. Interpretation of §114(b) of the Copyright Act

The Sixth Circuit's analysis in *Bridgeport Music* "begins and largely ends" with its interpretation of §114(b), the statute defining the limited exclusive rights granted to a sound recording copyright holder.[82] The relevant excerpt from §114(b) states:

> [T]he exclusive right to [create a derivative work based upon a copyrighted sound recording] is limited to the right to prepare a derivative work in which the actual sounds fixed in the sound recording are rearranged, remixed, or otherwise altered in sequence or quality. The exclusive rights [to prepare a derivative work] in a sound recording do not extend to the making or duplication of another sound recording that consists entirely of an independent fixation of other sounds.[83]

According to the *Bridgeport Music* court, the precise nature of digital sampling was to "rearrange, remix, or otherwise alter in sequence or quality" the "actual sounds" in a recording; therefore, all songs containing samples were derivative works and all unauthorized sampling was copyright infringement.[84] To be clear, the Sixth Circuit stated that only "a sound recording owner has the... right to "sample" his own recording."[85] The consideration of "how much a digital sampler alters the actual sounds or whether the ordinary lay observer can or cannot recognize the song or the artist's performance of it" is irrelevant to a sound recording infringement case where copying is not challenged.[86]

ii. The Other Justifications

The Sixth Circuit thought that the premeditated nature of digital sampling also weighed against its permissibility.[87] It pointed out that a composer may perceive a melody in her head and may believe it is her own, when in fact it is another's work that the composer no longer consciously recalls hearing.[88] But this is never the case in digital sampling – it is always an intentional appropriation of another's work.[89]

Another factor the Sixth Circuit used to justify its bright-line rule was its "ease of enforcement."[90] As a practical consideration, it worried about the "mental, musicological, and technological gymnastics" that would be necessary were courts to adopt a *de minimis* or substantial similarity analysis.[91] While conceding that the District Court judge "did an excellent job navigating these troubled waters," the Sixth Circuit thought that the *Bridgeport Music* litigation, which as of the date of the decision contained over 800 related cases "involving different samples from different songs," would benefit from the judicial economy of a bright-line rule.[92]

Finally, the Sixth Circuit justified its decision by pointing to the prevalent practice of licensing in the music industry, and proffered that the "market" will keep licenses appropriately priced because a sound recording copy-

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right holder "cannot exact a license fee greater than what it would cost... to just duplicate the sample... in a new recording."[93] Further, its opinion endorsed the view that a cost-benefit analysis "generally indicate[d] that it is less expensive for a sampler to purchase a license... rather than take his chances [in court]."[94] Due to the availability of market-priced samples and the prospect of independent mimicry, the Sixth Circuit believed its holding did not upset the balance between "protecting original works and stifling further creativity."[95]

iii. Why No Substantial Similarity or *De Minimis* Analysis

The "Get Off" sample was "back on the hook," and no substantial similarity or *de minimis* defense could rescue it from the black-hole of the Sixth Circuit's bright-line. The court explained that the reason why no *de minimis* or substantial similarity analysis applied was, in addition to the dictates of §114(b), that "even when a small part of a sound recording is sampled, the part taken is something of value.... [and] [n]o further proof... is necessary than the fact that the producer of the record or the artist on the record intentionally sampled because it would (1) save costs, or (2) add something new to the recording, or (3) both."[96] A footnote in the opinion further explained that digital sampling allows recording artists to save money by not hiring musicians; that is, sampling allows "the musician [to be] replaced with himself."[97]

3. The Decision and the Amended Opinion

Based on the above, the Sixth Circuit reversed the District Court's summary judgment grant to defendant No Limit.[98] In bemused resignation, it concluded its opinion by opining that there was no "Rosetta stone" for interpreting the Copyright Act, and that it was impossible to divine Congressional intent because the relevant legislative history predated digital sampling.[99]

However, on December 20, 2004 the Sixth Circuit, in addition to granting a rehearing based upon the appeal of No Limit and an amicus brief by the Recording Industry Association of America ("RIAA"), also amended portions of its opinion.[100] Two notable changes were (1) a reinstatement of the District Court's "originality" analysis;[101] and (2) a comment to the District Court inferentially inviting it to consider a "fair use" defense on remand.[102]

III. A Survey and Analysis of Public and Academic Reactions to *Bridgeport Music*

A. Introduction

Since the *Bridgeport Music* decision was published, commentary and criticism has erupted across the Internet, in the "blogosphere," and in other publications.[103] Unfortunately for the courts, the Internet and its blogosphere provide unregulated hunting grounds to flak unpopular decisions. Though the Internet is a source to be wary of, it is notable that on January 12, 2005 the U.S. Supreme Court cited its first blog in *U.S. v. Booker*.[104] The following survey and analysis of the critique of the *Bridgeport Music* decision was driven, in part, by this new cavalry of "dead horse" bloggers.

In the days and months following the decision, three main critiques emerged on the Internet and in the press: (1) the Sixth Circuit's literal interpretation of §114(b) of the Copyright Act to preclude substantial similarity or *de minimis* analysis was erroneous; (2) the Sixth Circuit, in a continuing tradition of judicial anathema, erroneously refused to consider or even mention "fair use" as a defense to NWA's sample of "Get Off;" and (3) the Sixth Circuit's economic justifications for "Get a license or do not sample" were based on faulty premises that served to mask the stifling effect the holding has on sample-based musicians.[105]

B. The Interpretation of §114(b) of the Copyright Act to Preclude Substantial Similarity or *De Minimis* Analysis

It is true that the "dead horse" authors of the digital sampling debate, at least those cited by the Sixth Circuit, endorsed the court's interpretation of §114(b). Six different law journal articles, as well as other legal commentary, were cited by the court as secondary authority.[106] For instance, Susan Latham, author of an article analyzing *Newton v. Diamond*, offered that §114(b) "by its own terms preclude[d] the use

of a substantial similarity test." Similarly, Al and Bob Kohn, authors of "Kohn on Music Licensing," a legal canon in the music industry, were cited as rejecting "judicial [application]" of substantial similarity and *de minimis* analysis because "it is believed... that the courts should take what appears to be a rare opportunity to follow a [bright-line] rule specifically mandated by Congress [in §114(b)]."[107] The Sixth Circuit evidently adopted this interpretation with little explanation other than commenting that "[n]o further proof... is necessary than the fact that the producer of the record or the artist on the record intentionally sampled because it would (1) save costs, or (2) add something new to the recording, or (3) both."[108]

However, as the District Court noted in its opinion, the *de minimis* principle guards against "*over-enforcement* of copyright laws [that] may unjustifiably stifle creativity" (emphasis supplied).[109] It is easy to forget that a *de minimis* use of a copyrighted work is generally understood as *excusing* infringement – and not as a defense to claim that no infringement occurred.[110] Further, as noted by Kohn & Kohn, *de minimis* analysis is "judicially applied"; meaning that the fact that the statutory text of §114(b) is silent to its availability does not necessarily preclude its judicial application."[111] Moreover, the Sixth Circuit itself, in *Gordon v. Nextel Communications*, recited the following mantra regarding *de minimis* infringement: "To establish that a *copyright infringement* is *de minimis*, the alleged infringer must establish that the copying of the protected material is so trivial as to fall below the threshold of substantial similarity, which is always an element of *actionable* copying" (emphasis supplied).[112]

Because the courts, as well as legal authors, have repeatedly described *de minimis* use as copying that "has occurred to such a trivial extent as to fall below the quantitative threshold of substantial similarity,"[113] the Sixth Circuit may have erroneously thought that *de minimis* use was only material to the specific inquiry as to whether actual, as opposed to actionable, copying occurred.[114] In any event, its interpretation of §114(b) provides for arguably absurd consequences if its interpretation were to be applied to the balance of the Copyright Act covering derivative work infringement.

For example, what if the Sixth Circuit's "literal" interpretation were uniformly applied to all derivative work infringement claims, such as a digital sampling case involving only the music composition copyright?[115] §106(2) of the Copyright Act grants to music composition authors "the exclusive right to prepare derivate works," and it defines a derivative work as "a [new] work... in which [the original] work [has been] recast, transformed or adapted."[116] There is no obvious difference in meaning between §114(b)'s prohibition against "rearranging" and "remixing" a sound recording and §106(2)'s prohibition against "recasting, transforming, or adapting" a musical composition.[117] It has been argued that "under the Sixth Circuit's approach, any adaptation of [the musical composition] would infringe, no matter how little was actually copied."[118] In the digital sampling cases heretofore, however, which involved only the composition copyright, the courts routinely applied substantial similarity and *de minimis* tests as threshold inquiries when evaluating copyright infringement.

The Sixth Circuit also appears to be con-

{ "The Sixth Circuit declared: 'Get a license or do not sample.'" }

sumed by the fact that all sampling is "intentional" and creates more culpability than, say, the composer who unwittingly appropriates another's melody as her own.[119] But the *de minimis* principle, again, is an excuse to infringement, and it is not facially clear why the "intentions" of the infringer should play into the analysis. As one "blogger" explained, the *de minimis* defense does not excuse infringement "because [it is] likely to be accidental, but [instead] because it simply isn't worth the trouble ... to spend years in litigation over a three-note guitar arpeggio."[120] *De minimis* analysis ought to be an inquiry into whether judicial discretion is appropriate to give effect the ultimate charge of the Copyright Act; that is, to foster creativity while assuring authors' commercial success. The Sixth Circuit ostensibly interpreted its discretion right out of the Copyright Act.

Finally, despite the apparent consensus amongst the "dead horse" authors cited in the *Bridgeport Music* opinion, another objection claims that the Sixth Circuit's interpretation of §114(b) will create *de facto* retroactive liability.[121] The argument, as articulated by the RIAA in its amicus brief, is that "[f]or more than a decade, the music industry has conformed its conduct to the [perceived] existing rules – obtaining licenses for sampling when appropriate, and relying on *de minimis* and fair use principles if and where [appropriate]."[122] According to the Sixth Circuit, then, an entire industry misconstrued §114(b) for over a decade. The "dead horse" authors cited by the court did not reflect the conventional wisdom in the music industry.

C. The Absence of Traditional Fair Use Analysis

The Sixth Circuit's analysis in *Bridgeport Music* did not reach "fair use."[123] Many commentators feared that, with respect to §114(b), the court had interpreted "fair use" right out of the Copyright Act.[124] But in its amended opinion, the Sixth Circuit blindsided this impression by hinting to the District Court that it was free to entertain "fair use" as a defense on remand.[125] The following is a designedly attenuated presentation of traditional "fair use" analysis.

Unlike a *de minimis* inquiry, the Copyright Act does explicitly provide for "fair use" as a defense to excuse copyright infringement.[126] §107 of the Copyright Act provides:

> [T]he fair use of a copyrighted work... for purposes *such as* criticism, comment, news reporting, teaching ..., scholarship, or research, is not an infringement of copyright. In determining ... fair use the factors to be considered *shall* include (1) the purpose and character of the use ... (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work.[127]

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It may be immediately objected that digital sampling does not neatly fall into a one of §107's listed categories, such as "criticism" or "research." However, the text of §107 speaks only illustratively when it describes "purposes *such as* criticism, comment... scholarship, or

research," and it was never intended to exhaust the potential categories of "fair use" purposes.[128] Legislative intent is clear, as the 1976 House Report to §107 explains, "there is no [intention] to freeze the doctrine in the statute.... [T]he courts must be free to adapt the doctrine to particular situations on a case-by-case basis."[129] Notwithstanding, in judicial practice there is anathema towards fair use inquiry in digital sampling infringement cases.[130] In practice, entertainment attorneys caution clients "that for a sample to qualify as "fair use," it *must be* used for purposes such as parody, criticism, teaching, news reporting, research or some other non-profit use."

Many applications of digital sampling militate towards a finding of "fair use." For instance, samples (1) whose "nature" was highly transformative of the original work; (2) where the "amount and substantiality of the portion used" constituted *de minimis* use; and (3) where the "effect of the use" had little bearing on the market or value of the original or derivative work.[131] It is designedly arguable that NWA's sample of "Get Off" was transformative, *-de minimis*, and also had little effect on the market for the original recording, especially given that "not even one familiar with the works of George Clinton" would recognize the appropriation.[132] If a traditional "fair use" defense is entertained on remand, the following two considerations are likely paramount: (1) to what extent does the commercial purpose of "100 Miles" weigh against a finding of fair use; and (2), does the ability of the "Get Off" sample to be ultimately recognized when told of its source destroy the "amount and substantially of the portion [copied]" prong of the fair use defense?[133]

Traditional "fair use" analysis is apt to ramble along in legal writings, often ballooning its content with well-founded observations. The four-prong balancing test set forth in the text of §107 is a simple analytical framework – but there is nothing easy in its application.[134] There is much to recommend in an analysis that is not dogmatically beholden to the categories and factors enumerated in §107. In Michael J. Madison's comprehensive review of "fair use," he wrote "the question ought ... to be... whether the [sampler's] efforts [were] more socially valuable than the outcome produced by allowing the copyright holder to enjoin the use or obtain payment."[135] Or as Judge Learned Hand wrote in *West Publishing Co. v. Edward Thompson Co.*, "fair use" is really just a question of whether "copying... has been done to an unfair extent."[136]

D. Economic Un-Justifications and Starving Artists

Mike "D," a member of The Beastie Boys, a Hip-Hop phenomenon that has made a "career...of transforming the sounds of the past into...new music,"[137] recently described his group's sample-clearing process:

> It's very tedious. We have to sit there and basically break out every single component of every track that we do and make a list of the sources for everything. We go through every blip of sound and decide what's significant enough that we need to contact the owner. From there, it's a whole bunch of lawyer craziness.[138]

The above quote was taken from an interview in a magazine that reported on the *Bridgeport Music* decision and the change in law.[139] Will someone please tell Mike "D" that now "everything" is significant enough to require a license?

The Sixth Circuit believes that "the market will control the license price [of a sample] and keep it within bounds."[140] But what is "out-of-bounds" in the context of copyright infringement? The fact that licenses are "market-priced" does not demonstrate whether the appropriate balance between "fostering creativity and assuring author[s]... commercial success" has been tilted.[141] The reality is that unless you are a major Hip-Hop act with deep pockets for licenses and attorney fees, the *Bridgeport Music* holding effectively bans you from practicing the Hip-Hop art form. Even before the *Bridgeport Music* decision, critics of current licensing practices had complained of "barrier[s] to entry for independent or developing acts."[142]

For instance, a sound recording license for a three-second sample will cost in the neighborhood of $1500, a "looped" three-second sample $5000, and any sample over four seconds could "run into the tens of thousands of dollars."[143] A frugal Hip-Hop act can spend $60,000 on sampling fees to record an album.[144] But for acts like the Beastie Boys, who in the past have

recorded albums where literally hundreds of disparate snippets of music and sounds are interwoven – there is almost no ceiling to the potential expense.[145]

The Sixth Circuit also ignored in its economic appraisal what it conceded later in its opinion: "Today's sampler is tomorrow's samplee.... [and] the incidence of 'live and let live' has been relatively high."[146] If it is true that the Hip-Hop industry has engaged in reciprocity in cases involving *de minimis* or other qualitatively insignificant samples, and in fact has thrived under what the Recording Industry Association of America ("RIAA") perceived as "existing rules,"[147] then on what basis of copyright law can the result in *Bridgeport Music* be justified? This argument does not challenge the Sixth Circuit's correct assertions that many applications of digital sampling do "replace the musician with himself" and reduce the need for studio musicians. Instead, the argument is that, on balance, fostering creativity by allowing *de minimis* sampling has more net social utility than protecting the speculative economic interests of the original recording artists'. In 1996, entertainment attorney, Robert M. Syzmanski, prophetically wrote that "[i]t is doubtful that anyone has ever picked up a guitar in the hope that one day he will be able [to] license a two-second sample."[148]

The Sixth Circuit claimed that it appeared "cheaper to license than to litigate."[149] If this is true, it is conceivably because record companies do not want to volunteer as the watershed judicial guinea pig. Before *Bridgeport Music,* no court had "comprehensively tackled the complex legal issues involved in sampling."[150] Some argue that due to the lack of clear judicial guidelines "an industry custom has arisen whereby users pay for licenses even where they do not need them."[151] What constituent in the music industry has incentive to roll the judicial dice, especially where the *de facto* rules in the Hip-Hop industry have ushered the musical genre into mainstream ubiquity?

IV. Electronica, and the Rest of the History of Digital Sampling

A. What is Electronica?

As a musical style, Electronica[152] does not "employ traditional approaches to composition such as reliance on the playing of notes, the use of overt tonality and melody, or the generation of accompaniment for vocals."[153] An accurate recipe for an Electronica composition is: (1) assault the listeners with tachycardia producing tempos of 140 to 160 BPM (beats per minute); (2) rampage their eardrums with thumping drum kicks and enveloping bass lines; (3) challenge their sonic sanity with industrial sounding, computer authored "notes;" and (4) play any discernible "notes" at "physically impossible speeds or [in impossible] note combinations."[154] The sonic anarchy and hyperactive cacophony of the genre has led some to label Electronica as the only thing "worse than rap."[155]

B. How Does Digital Sampling Fit In?

Music composed in the Electronica style described often achieves "the deconstructive manipulation of sound."[156] The digital sampler

{ "Because of the availability of market-priced samples and the prospect of independent mimicry, the Sixth Circuit believed its holding did not upset the balance between 'protecting original works and stifling further creativity'." }

is a prevalent tool towards achieving this "deconstruction" and "abuse;" in fact, standing alone it is sufficient. For instance, a musician can use a digital sampler to copy a two second blip of music, and without introducing any other sounds into the production, produce a composition complete with rhythm, melody, and harmony.[157] Electronica "Noise" artists such as Masami Akita (known as "Merzbow") rely on "hellish[ly] processed" samples from an unending variety of sources to engage in their sonic trench warfare. The unanticipated results demonstrate to listeners the "range of possibilities in a given [sonic] code."[158]

The most apt examples of deconstructive digital sampling, however, were recently created in specific protest of the *Bridgeport Music* decision. An organization called "Downhill Battle" began an online protest and participants of the protest were required to create a 30 second composition using only a digital sampler and the two-second sample of "Get Off."[159] A total of 177 entries were received, each composed only through the manipulation of the sonic waveforms in the sample; for instance, slicing, layering, looping, stretching, filtering, smacking, flipping or rubbing down the waveforms in the sample.[160] One contest entry was a satirical Electronica version of the "Star-Spangled Banner."[161] Were a listener not armed with the knowledge of the source of these alien sounds, it would be impossible to recognize its source.

V. The Musical Scales of Justice: §102(b) and the Reverse Engineering of Sonic Ideas as Fair Use

A. Introduction: Everything in Between A Sample

One common thread to the panoply of digital sampling scholarship is the almost chronic adherence to Hip-Hop as the contextual prism for the sampling debate. The "deconstructive" applications of digital sampling, such as were discussed regarding Electronica composition, have gone largely ignored.[162] As a result, the use of digital sampling as a stepping stone to accomplish "the deconstructive manipulation of sound" may have been outside the purview of the Sixth Circuit when deciding *Bridgeport Music*.[163] This section of the Note asserts two penultimate arguments: (1) the constituent elements of sound (termed "sonic" ideas) are embedded within a given sound recording's "sonic" expression; and (2) that by "slicing, layering, looping, stretching, filtering, smacking, flipping or rubbing" down the waveforms in a sample, an Electronica artist can successfully, even if unwittingly, destroy any protectable "sonic" expression contained in an unedited sample. Finally, this section argues that when the "sonic" expression in the unedited sample is entirely absent in its edited "final version," the sampling should be excused as "fair use" reverse engineering because the new expression in the "final version" was engineered by uncopyrightable "sonic" ideas.

B. Hey! What's the Idea? §102(b) and Reverse Engineering as Fair Use

§102(b) of the Copyright Act demands that copyright protection extend only to original expression and not "to any idea."[164] Notwithstanding, when an artist, in order to appropriate the "ideas" of a work, needs to first make an infringing "intermediate" copy, the judiciary has enforced the spirit of §102(b) through the application of the reverse engineering branch of "fair use."[165] Digital sampling, when used as a technique to discover the hidden galaxies of music embedded within recorded sound, makes a suitable candidate for "fair use" reverse engineering analysis.[166]

In the seminal reverse engineering case, *Sega Enters., Ltd. v. Accolade, Inc.* ("*Sega Enterprises*"), the Ninth Circuit announced that "where [reverse engineering] is the only way to gain access to the ideas and functional elements embodied in a [work] and where there is a legitimate reason for seeking such access, [reverse engineering] is a fair use."[167] The "access" and "reverse engineering" in *Sega Enterprises* took the form of an intermediate infringing copy of software code, held to be "fair use" because the intermediate copy was necessary to "disassemble" the code to excavate the "ideas" ultimately used in the defendant's non-infringing "final version."[168]

Applying this analytical mold to digital sampling requires comparison of sampling's

three discrete stages: (1) recording the "sonic" numbers in the sample, (2) editing the sample with digital audio devices, and (3) playing back the modified sample.[169] The first stage (recording the sonic numbers) is analogous to the "intermediate copying" of the software code, the second stage (editing the digital sample) is akin to "disassembling" the code, and the third stage (playback of the edited sample) is similar to the non-infringing "final version" of the code implemented in the new software.

For the analogy between computer code and digital sampling to hold true, and therefore, for reverse engineering "fair use" to be a valid defense in digital sampling cases, then, following the *Sega Enterprises* framework: (a) only the "sonic" ideas in an unedited digital sample can remain in the edited "final version;" and (b) the sampling artist cannot reasonably achieve the appropriation through another route.[170] As a threshold matter, a definition and discussion of "sonic" ideas is necessary.

1. What are Sonic Ideas and how are they Different from Musical Ideas?

The courts have not had great success in defining musical "ideas" or determining whether more than "ideas" have been copied in a composition infringement case.[171] All that is clear is that certain combinations of notes on a "lead sheet" will cross the threshold from musical "idea" to protectable "expression."[172] The ambiguity is not surprising, however, because the task of differentiating between a work's "expression" and its embedded "ideas" is a boundary that "[n]obody has ever been able to fix," regardless of whether the subject matter is literary, musical, or visual.[173] Nonetheless, when a sound recording of a musical composition is the subject of the idea/expression inquiry, and the discussion of "sonic" ideas and "sonic" expression is introduced, the level of abstraction is (literally) extrapolated.

This Note offers that "sonic" ideas are fairly described as "the constituent elements of sound; that is, the raw matter of waveforms and electrical currents."[174] "Sonic" expression, in turn, can be described as "the product of these "physics" of sound when oriented and actuated by a performing musician."[175] The precise definitions pale in importance compared to the question their concepts beg regarding reverse engineering: If the "sonic" expression is recorded, can it subsequently be atomized and then repackaged (creating new expression) to an extent where all meaningful "sonic" relationships in the original recording are destroyed?[176]

2. The Downhill Battle Entrants as "Fair Use" Reverse Engineering

The 177 entries in the "Downhill Battle" protest are put forth as examples of "fair use" reverse engineering. The Downhill Battle samplers, by "disassembling" the "Get Off" sample through "slicing, layering, looping, stretching, filtering, smacking, flipping [and] rubbing" down the waveforms in the sample, discovered never heard before or even imaginable sounds buried inside the original recording. "Work[ing] with sonic waveforms at their most fundamental level," the entries made audible a small sampling of the "range of possibilities in a given [sonic] code."[177] The unedited three-note arpeggio sampled in "Get Off" and the Downhill Battle entries (such as the "Star-Spangled Banner" reincarnation) share no humanly cognizable expression, either musically or sonically. Even if the discussion of sonic ideas and expression is vague or not accepted, it is inarguable that the musical qualities of melody, harmony and tone been edited out of existence in the Downhill Battle entries.

The second prong of a successful "fair use" reverse engineering defense, that the infringer could not reasonably achieve the appropriation through another route, is also satisfied with respect to the applications of digital sampling used by artists such as Merzbow and the Downhill Battle participants. The sampler cannot know what new expression will be produced before he edits the sample. The hidden galaxies of sound within a sample exist in an experiential vacuum where the results of the hellish sound deconstruction are unknowable until playing back the edited sounds. The judicially suggested alternative route to sampling, the "independent recreation of the desired sample,"[178] is therefore incompatible with the realities of "hellish[ly] processed"[179] samples: the sampling artist does not know beforehand what the "desired sample" will sound like in its "final version."

VI. Conclusion: If the Sample is Edited Beyond All Recognition, Sound Recording Infringement Should not Attach

Miles," and so both sonic and compositional expression remain in the "final version" of the sample.

This proposal is respectful of both the Sixth Circuit's statutory interpretation of §114(b) and §102(b)'s superseding statutory

{ "What constituent in the music industry has incentive to roll the judicial dice, especially where the de facto rules in the Hip-Hop industry have ushered the musical genre into mainstream ubiquity?" }

Attacks against the Sixth Circuit's statutory interpretation of §114(b) or its economic justifications for it bright-line rule are not especially promising in the context of the *Bridgeport Music* action and its judicial resolution. It is also unknown how the disputed "Get Off" sample in *Bridgeport Music* would perform if ultimately subjected to traditional "fair use" analysis by the District Court on remand.

Instead, this Note proposes that the Sixth Circuit's "Get a license or do not sample" commandment can be superseded by §102(b)'s statutory demand that "ideas" are never copyrightable. The "fair use" reverse engineering defense under §107 can be the means to give effect to §102(b)'s spirit. As an alternative to tackling the judicially unmanageable vagaries of "sonic" ideas and expression, however, this Note further proposes that the reverse engineering test can be administered through a simple inquiry: whether the appropriation from the unedited sample is audibly recognizable in its "final version," even after the listener is told of its source and location in the allegedly infringing work. If the final appropriation is not "audibly recognizable," then it is "fair use" reverse engineering, because no humanly cognizable appropriation has occurred. By this measure, the disputed sample in *Bridgeport Music* is not a valid instance of "fair use" reverse engineering. If one is told the source of the "Get Off" sample, she can recognize the appropriation in "100 demand that "ideas" are not copyrightable. It is a compromise between *Bridgeport Music's* standard of absolute liability and the lower court's (traditional) substantial similarity and *de minimis* inquiries. An objection, however, is that this proposal is indistinguishable in judicial application from an absolute liability standard. After all, since all "audibly recognizable" samples infringe under this proposal, and a sample's source cannot be identified unless "audibly recognizable," then the results of *Bridgeport Music's* standard and this Note's proposal are seemingly identical. However, this objection ignores the reality that under the *Bridgeport Music* rule, mere knowledge of a sample's origin can establish liability. This Note's proposal, however, removes the prospect of "knowledge" as sufficient to establish liability creativity. Therefore, it fosters creativity in two ways: (1) Electronica artists do not need to seal their recording studios from persons who might inform on their sampling habits; and (2) Electronica artists will never fear engaging in frank discussions of their sampling sources and editing techniques.

ENDNOTES

* J.D. candidate, May 2006, Vanderbilt University Law School. I would like to thank Profes-

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[1] Matthew Africa, *The Misuse of Licensing Evidence in Fair Use Analysis: New Technologies, New Markets, and the Courts*, 88 CAL. L. REV. 1145, 1173 n.121 (2000).

[2] *See also* Bridgeport Music, Inc. v. Dimension Films, 383 F.3d 390, 400–01 (6th Cir. 2004), *amended, rehearing granted*, 2004 U.S. App. LEXIS 26877 (6th Cir. 2004). *See generally* J. Michael Keyes, *Musical Musings: The Case for Rethinking Music Copyright Protection*, 10 MICH. TELECOMM. & TECH. L. REV. 407 (2004); Brandon G. Williams, Note, James Brown v. In-Frin-Jr: *How Moral Rights can Steal the Groove*, 17 ARIZ. J. INT'L & COMP. L. 651 (2000).

[3] *See Bridgeport Music, Inc.*, 383 F.3d at 400–01.

[4] *Id.* at 401.

[5] Congress, for its part, missed an opportunity to squarely address digital sampling when it drafted the Digital Millennium Copyright Act of 1998. *See* Larry Waks & Sheri Hunter, *Digital Sampling: The Song Remains the Same, at* http://images.jw.com/com/publications/337.pdf (last visited Apr. 8, 2005).

[6] AL KOHN & BOB KOHN, KOHN ON MUSIC LICENSING 1486 (3d ed. 2002).

[7] *Bridgeport Music, Inc.*, 383 F.3d at 398.

[8] 17 U.S.C. § 114(b) (2005).

[9] *Bridgeport Music, Inc.*, 383 F.3d at 395.

[10] 780 F. Supp. 182, 183 (S.D.N.Y. 1991). This first digital sampling opinion began with the Biblical admonition, "Thou shalt not steal." The record label of rapper Biz Markie released his album, "I Need a Haircut," which contained the song "Alone Again." This track digitally sampled Gilbert O'Sullivan's recording of "Alone Again (Naturally)." The appropriation consisted of 'taking' three words from O'Sullivan's recording, and also a portion of the background music. Without entertaining defenses of fair use, substantial similarity, or *de minimis* use, or even distinguishing between compositional and sound recording infringement, the judge in *Grand Upright* granted plaintiff's preliminary injunction to halt further sale of "I Need a Haircut," and referred the case to a U.S. attorney's office for potential criminal prosecution. *Id.*

[11] 17 U.S.C. § 102(b) (2005).

[12] *Bridgeport Music, Inc.*, 383 F.3d at 398.

[13] Matthew G. Passmore, Note, *A Brief Return to the Digital Sampling Debate*, 20 HASTINGS COMM. & ENT. L.J. 833, 837 (1998).

[14] TODD SOUVIGNIER, LOOPS AND GROOVES: THE MUSICIAN'S GUIDE TO GROOVE MACHINES AND LOOP SEQUENCERS 18 (2003).

[15] *Id.* at 18–19.

[16] *Id.* at 19.

[17] *Id.* Two elements determine the quality of a sample: the "sample rate" and its "bit depth." Sample rate refers to the number of times per second that the sound's waveform is measured, and bit depth refers to the number of different voltage levels the sampling system can detect. The better the sample rate and bit depth, the more accurate the recording. *See id.* at 18–19.

[18] *See* Greg Holmes, *The Fairlight CMI*, The Holmes Page, *at* http://www.ghservices.com/gregh/fairligh/ (last modified Jan. 15, 2005).

[19] *Id.* The Fairlight CMI had a sample rate of 24 kHz (24,000 measurements per second) and used two 8-bit depth processors (meaning each processor could measure 256 different voltage levels). In contrast, the present standards for DVD-audio are 96 kHz sample rates (96,000 measurements per second) and 24-bit depth processing (16.8 million voltage levels). How-

ever, the human ear cannot distinguish sample rate greater than 24 kHz; in addition, the analog circuitry typically used in DAC converters generally cannot accomdate greater than 17-19 bit sound. *See Digital Audio Tutorial: Misinformation, at* http://www. musiq.com/recording/digaudio/intro2.html (last visited Apr. 8, 2005); *Digital Audio Tutorial:Bit Rates and File Formats, at* http://www.musiq.com/recording/digaudio/bitrates.html (last visited Apr. 8, 2005) (for a basic introduction to digital audio).

[20] SOUVIGNIER, *supra* note 14, at 32–33.

[21] DIGITAL HOME RECORDING 10 (Carolyn Keating ed., 1998).

[22] *Id.* at 10–11.

[23] *Id.*

[24] *Id.* at 10. *See generally* Kenneth M. Achenbach, Comment, *Grey Area: How Recent Developments in Digital Music Production Have Necessitated the Reexamination of Compulsory Licensing for Sample-Based Works*, 6 N.C. J.L. & TECH. 187, 202 (2004).

Despite the fact that looping has existed for years, modern software samplers allow this method to be pushed to new levels. Many producers not only use looped samples in the traditional manner but also cut out smaller and smaller snippets of sound, essentially deconstructing a recording to a catalogue of source sounds. A producer can then re-sequence these sounds in an entirely novel key or tempo. Producers are able to digitally import the sound of a kick drum or guitar chord, recorded perhaps half a century ago, in a composition similar to the way classical composers use a particular section of the orchestra, playing a particular note.
Id.

[25] Robert M. Syzmanski, *Audio Pastiche: Digital Sampling, Intermediate Copying, Fair Use*, 3 UCLA ENT. L. REV. 271, 272–76 (1996).

[26] *See* http://www.loopwise.com/music_software.html (last visited Apr. 8, 2005).

[27] Stephen R. Wilson, *Music Sampling Lawsuits: Does Looping Music Samples Defeat the De Minimis Defense?*, 1 J. HIGH TECH. L. 179, 180 n.9 (2002).

[28] Susan J. Latham, Newton v. Diamond*: Measuring the Legitimacy of Unauthorized Compositional Sampling-A Clue Illuminated and Obscured*, 26 HASTINGS COMM. & ENT. L.J. 119, 122–23 (2003).

[29] BRUCE GERRISH, REMIX: THE ELECTRONIC MUSIC EXPLOSION 13 (2001). For a lyrical history of Hip-Hop in the South Bronx, *see* BOOGIE DOWN PRODUCTIONS, *South Bronx, on* CRIMINAL MINDED (B Boy Records 1987)

Now way back in the days when hip-hop began, with CoQue, LaRock, Kool Herc, and then Bam..... There's got to be a better way to hear our music every day... Beat boys getting blown away but coming outside anyway. They tried again outside in Cedar Park, power from a street light made the place dark. But yo, they didn't care, they turned it out, I know a few understand what I'm talkin about... Remember Bronx River rollin thick With Kool, DJ Red Alert and Chuck Chillout on the mix... When Afrika Islam was rockin the jams and on the other side of town was a kid named Flash. Patterson and Millbrook projects, Casanova all over, ya couldn't stop it: The Nine Lives Crew, the Cypress Boys: The real Rock Steady taking out these toys. As odd as it looked, as wild as it seemed, I didn't hear a peep from a place called Queens. It was seventy-six, to 1980, the dreads in Brooklyn was crazy. You couldn't bring out your set with no hip-hop because the pistols would go ...
Id.

[30] *See* GERRISH, *supra* note 29, at 13.

[31] GERRISH, *supra* note 29. For an explanation of common dee-jay techniques, *see* Zivco Atanas Popov, *Impress the Crowd with these DJ Techniques, at* http://www.internetdj.com/article.php?storyid=518 (Dec. 31, 2004).

[32] Latham, *supra* note 28, at 123.

[33] Henry Self, *Digital Sampling: A Cultural Perspective*, 9 UCLA ENT. L. REV. 347, 350 (2002).

[34] Nolan Strong, *Ruling on Sampling Could have an Effect on Hip-Hop, at* http://www.allhiphop.com/hiphopnews/?ID=3483 (Sept. 8, 2004). *See generally* Roxana Badin, Comment, *An Appropriate(d) Place in Transformative Value: Appropriation Art's Exclusion* from Campbell v. Acuff-Rose Music, Inc., 60 BROOK. L. REV. 1653 (1995); Self, *supra* note 33.

[35] Strong, *supra* note 34. *See generally Henry Self, Digital Sampling: A Cultural Perspective,* 9 UCLA ENT. L. REV. 347 (2002).

[36] Marjorie Hein, *Trashing the Copyright Balance,* The Free Expression Policy Project, *at* http://www. fepproject.org/commentaries/bridgeport.html (last visited Apr. 8, 2005).

[37] *See* Thomas Goetz, *Sample the Future,* WIRED MAGAZINE, November 2004, at 180. *See generally "Some Rights Reserved": Building a Layer of Reasonable Copyright, at* http://www.creativecommons.org/ about/history (creativecommons.org is a prominent website started by Stanford Law professor Lawrence Lessig whose mission is to retrain copyright into a more friendly, flexible, and democratic form) (last visited Apr. 8, 2005).

[38] Strong, *supra* note 34 (George Clinton expresses sympathy for struggling rap artists, presents his view of digital sampling as an important cultural communication device, and describes his licensing fee structure which allow artists to freely sample his music up to the point where the new work becomes commercially successful).

[39] Michael W. Miller, *Creativity Furor: High-Tech Alteration of Sights and Sounds Divides the Art World,* WALL ST. J., Sept. 1, 1987.

[40] *See* 17 U.S.C. §§ 114–115 (2005).

[41] The procedural history of this lawsuit is cored down for clarity and readability. *See* Brief of Plaintiffs-Appellants *at* 2, Bridgeport Music, Inc. v. Dimension Films, No. 02-6521, 2004 U.S. App. LEXIS 26877 (6th Cir. Dec. 20, 2004).

[42] Steve Seidenberg, *George Clinton's Record Label Takes on Music Samplers,* CORPORATE LEGAL TIMES, Dec. 2004, at 26.

[43] Brief of Appellee No Limit Films LLC *at* 9–10, Bridgeport Music, Inc. v. Dimension Films, No. 02-6521, 2004 U.S. App. LEXIS 26877 (6th Cir. Dec. 20, 2004).

[44] Bridgeport Music, Inc. v. Dimension Films, 230 F. Supp. 2d 830, 838 (M.D. Tenn 2002), *aff'd in part, rev'd in part, remanded,* 383 F.3d 390 (6th Cir. 2004), *amended, rehearing granted,* 2004 U.S. App. LEXIS 26877 (6th Cir. 2004).

[45] *Id.*

[46] *Id.* at 839.

[47] *Id.* at 841.

[48] *Id.*

[49] *Id.*

[50] 17 U.S.C. § 102(a) (2005).

[51] *Bridgeport Music, Inc.,* 230 F. Supp. 2d at 830.

[52] *Id.* at 839. Had the copyright in the music composition been at issue, the "collection of notes" would have been the subject of an originality claim. *See* Newton v. Diamond, 349 F.3d 591, 596 (9th Cir. 2003).

[53] *Id.*

[54] *See generally* Feist Publications, Inc. v. Rural Telephone Service Co., 499 U.S. 340 (1991).

[55] Congress has the responsibility to develop laws to "[secure] for limited times" the rights authors have in their works. U.S. CONST., art. I, § 8, cl. 8. This charge requires Congress to strike the proper balance between fostering creativity and assuring authors benefit from the commercial success of their works. Warner Bros., Inc. v. American Broadcasting Cos., 720 F.2d 231, 240 (2d Cir. 1983). The current codification of this delicate and probably impossible task is the Copyright Act.

[56] *See Bridgeport Music, Inc.,* 230 F. Supp. 2d at 840. Copyright ownership and actual copying

were not contested for purposes of this motion. For a representative case discussing the substantial similarity requirement, *see, e.g.*, M.H. Segan Ltd. v. Hasbro, Inc., 924 F. Supp. 512, 518 (S.D.N.Y. 1996).

[57] *See generally* Ringgold v. Black Entertainment Television, Inc., 126 F.3d 70 (2d Cir. 1997).

[58] *Id.*

[59] *Bridgeport Music, Inc.*, 230 F. Supp. 2d at 840. There is a conclave of tests that courts' use to evaluate substantial similarity; for instance, the District Court in *Bridgeport Music* applied both the "quantitative/qualitative" and "fragmented literal similarity" tests. *See id.* at 839–43.

[60] The discussion of the District Court's application of the quantitative/qualitative and fragmented literal similarity approaches to substantial similarity are omitted as beyond the scope of this Note. *Id.* at 842.

[61] *Id.* at 841.

[62] *Id.* at 841–42.

[63] *Id.* at 842.

[64] *Id.* at 842–43.

[65] Brief of Plaintiffs-Appellants *at* 1, Bridgeport Music, Inc. v. Dimension Films, 2004 U.S. App. LEXIS 26877 (6th Cir. 2004) (02-6521).

[66] *Id.* at *26–27.

[67] *Id.* at *15.

[68] *See generally Bridgeport Music, Inc. v. Dimension Films*, 383 F.3d 390 (6th Cir. 2004), *amended, rehearing granted*, 2004 U.S. App. LEXIS 26877 (6th Cir. 2004).

[69] *Id.* at 396.

[70] *Id.* at 401, n.13. In the Sixth Circuit's amended opinion, it made mention of *Grand Upright* as well as *United States v. Taxe*, 540 F.2d 961 (9th Cir. 1976), but distinguished these opinions as not squarely addressing the issues in *Bridgeport Music. Bridgeport Music, Inc. v. Dimension Films*, No. 02-6521, 2004 U.S. App. LEXIS 26877, at *2–3 (6th Cir. 2004), *amending and granting rehearing of* 383 F.3d 390 (6th Cir. 2004). *See supra* note 10.

[71] *Bridgeport Music, Inc.*, 383 F.3d at 396 n.4.

[72] It is unknown what analysis would apply if actual copying was disputed. *Id.* at 398.

[73] *Id.* at 399.

[74] Many blogosphere commentators interpreted the Sixth Circuit's original opinion to eliminate "fair use" as a viable defense; however, in its amended opinion the Sixth Circuit invited the district court to entertain a "fair use" defense on remand. *Bridgeport Music, Inc.*, 2004 U.S. App. LEXIS 26877, at *5.

[75] *Bridgeport Music, Inc.*, 383 F.3d at 396. The Sixth Circuit ultimately redacted this portion of the opinion and replaced the text with "We agree with the district court;s analysis on the question of originality." *Bridgeport Music, Inc.*, 2004 U.S. App. LEXIS 26877, at *2.

[76] 17 U.S.C. § 114(b) (2005).

[77] *Bridgeport Music, Inc.*, 383 F.3d at 397–98.

[78] *Id.* at 400–02 (the court referenced cases "frequently cited" in the digital sampling debates but determined them inapplicable because they generally involved disputes over the composition copyright and not the sound recording copyright).

[79] *Id.* at nn.6, 8–12, 15.

[80] *Id.* at 399.

[81] *See supra* text accompanying note 1.

[82] *Bridgeport Music, Inc.*, 383 F.3d at 397.

[83] Copyright Act of 1976, 17 U.S.C. § 114(b) (2005).

[84] *Bridgeport Music, Inc.*, 383 F.3d at 398–99.

[85] *Id.* at 398.

[86] *Id.* at 398 n.8 (*citing* Latham, *supra* note 28).

[87] *See id.* at 399.

[88] The most famous case of this nature is *ABKCO Music, Inc. v. Harrisongs, Ltd.*, 722 F.2d 988 (2d Cir. 1983) in which former Beatle George Harrison was sued for copyright infringement of the Chiffon's "He's So Fine." The compositional infringement suit was successful: according to the court Harrison had subconsciously ripped off the Chiffon's tune in his work, "My Sweet Lord." *Id.*

[89] *Bridgeport Music, Inc.*, 383 F.3d at 399.

[90] *Id.*

[91] *Id.*

[92] *Id.*

[93] *Id.*

[94] *Id.* at 400 n.12 (citing Stephen R. Wilson, *Music Sampling Lawsuits: Does Looping Music Samples Defeat the De Minimis Defense?*, 1 J. HIGH. TECH. L. 179 n.97 (2002)).

[95] *Id.* at 398.

[96] *Id.* at 399.

[97] *Id.* at 399 n.11 (*citing* Christopher D. Abramson, *Digital Sampling and the Recording Musician: A Proposal for Legislative Protection*, 74 N.Y.U. L. REV. 1660, 1668 (1999)).

[98] *Id.* at 402.

[99] *Id.* at 401–02.

[100] *See generally* Bridgeport Music, Inc. v. Dimension Films, No. 02-6521, 2004 U.S. App. LEXIS 26877 (6th Cir. 2004), *amending and granting rehearing of* 383 F.3d 390 (6th Cir. 2004).

[101] *Id.* at *2.

[102] *Id.* at *6.

[103] "Blogosphere" refers to the hemisphere on online journals that exist on the Internet.

[104] United States v. Booker, 125 S. Ct. 738, 775 n.4 (2005).

[105] *See supra* text accompanying notes 76–81.

[106] Bridgeport Music, Inc. v. Dimension Films, 383 F. 3d 390, 398–401 nn.6, 8–12, 15 (6th Cir. 2004), *amended, rehearing granted*, 2004 U.S. App. LEXIS 26877 (6th Cir. 2004).

[107] *Id.* at 400 n.14 (citing KOHN & KOHN, *supra* note 6, at 1486–87).

[108] *Id.* at 399.

[109] *Id.*

[110] *See supra* text accompanying note 59.

[111] KOHN & KOHN, *supra* note 6, at 1487.

[112] Gordon v. Nextel Communications, 345 F.3d 922, 924 (4th Cir. 2003)(borrowing language from the copyright staple *Ringgold v. Black Entertainment Television, Inc.*, 126 F.3d 70, 74 (2d Cir. 1997)(first and third emphasis added)).

[113] *Ringgold*, 126 F.3d at 74.

[114] *Bridgeport Music, Inc.*, 383 F.3d at 399.

[115] *See, e.g.*, Newton v. Diamond, 349 F.3d 591, 597 (9th Cir. 2003) (The Ninth Circuit held that the Beastie Boy's literal appropriation of 3 notes from flautist James Newton's "Choir" was *de minimis* because their derivative work "Pass the Mic" did not appropriate "the overall essence or structure" of the composition. The Beastie Boys had obtained a license in the sound recording of "Choir," and so the Ninth Circuit only considered whether the composition was infringed – despite the literal copying involved.).

[116] Copyright Act of 1976, 17 U.S.C. §§ 101, 106(2) (2005).

[117] *Id.* at §§ 101, 106(2), 114(b).

[118] Proskauer Rose, *Client Alert: Sixth circuit Eschews Use of Substantial Similarity, De Mini-*

mis and Originality Analyses in Copyright Infringement Actions Involving Digital "Sampling" of Sound Recordings, available at http://www.proskauer.com/news_publications/client_alerts/content/2004_09_24 (Sept. 24, 2004).

[119] *See supra* text accompanying notes 87–99.

[120] Joe Gratz, *6th Cir.: There's No Such Thing As De Minimis Sampling, at* http://www.joegratz.net/archives/2004/09/08/6th-cir-theres-no-such-thing-as-ide-minimisi-sampling/ (Sept. 8, 2004).

[121] Gary Young, *Law & Technology,* BROWARD DAILY BUSINESS REVIEW, Sept. 29, 2004, at 11.

[122] *Id.*

[123] *See supra* text accompanying notes 71–77. *See generally* Bridgeport Music, Inc. v. Dimension Films, 383 F.3d 390 (6th Cir. 2004).

[124] *See, e.g.*, Daniel Fisher, *Name That Note,* FORBES, Oct. 18, 2004, at 54; Marjorie Heins, *Commentary: Trashing the Copyright Balance,* Free Expression Policy Project, *available at* http://www.fepproject.org/ commentaries/bridgeport.html (last updated Mar. 30, 2005).

[125] Bridgeport Music, Inc. v. Dimension Films, No. 02-6521, 2004 U.S. App. LEXIS 26877, at *6 (6th Cir. 2004).

[126] 17 U.S.C. § 107 (2005) (emphasis added).

[127] *Id.* (emphasis added).

[128] H.R. REP. NO. 94-1476, at 65–66 (1976).

[129] *Id.* at 66.

[130] *But see generally* Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569 (1994) (digital sampling infringement suit involving rap artists 2 Live Crew and their raunchy parody of Roy Orbinson's "Pretty Woman").

[131] *See supra* text accompanying notes 46–49, 60–64.

[132] *See* Bridgeport Music, Inc. v. Dimension Films, 383 F.3d 390, 395 (6th Cir. 2004), *amended, rehearing granted,* 2004 U.S. App. LEXIS (6th Cir. 2004).

[133] The second consideration is discussed again in Section VII. *See infra* Part VII.

[134] *See supra* text accompanying notes 127–129.

[135] Michael J. Madison, *A Pattern-Oriented Approach to Fair Use,* 45 WM. & MARY L. REV. 1525, 1556 (March 2004).

[136] West Publ'g Co. v. Edward Thompson Co., 169 F. 833, 861 (C.C.D.N.Y. 1909).

[137] Eric Steuer, *The Remix Masters,* WIRED MAGAZINE, Nov. 2003, at 185, 185–86.

[138] *Id.* at 186.

[139] *Id.* at 188.

[140] Bridgeport Music, Inc. v. Dimension Films, 383 F.3d 390, 398–99 (6th Cir. 2004), *amended, rehearing granted,* 2004 U.S. App. LEXIS 62877 (6th Cir. 2004).

[141] Bridgeport Music, Inc. v. Dimension Films, 230 F. Supp. 2d 830, 840 (M.D. Tenn. 2002)(*citing* Warner Bros. Inc. v. American Broadcasting Cos., 720 F.2d 231, 240 (2d Cir. 1983)), *aff'd in part, rev'd in part, remanded,* 383 F.3d 390 (6th Cir. 2004), *amended, rehearing granted,* 2004 U.S. App. LEXIS 26877 (6th Cir. 2004).

[142] The Sixth Circuit's proposed alternative, independent recreation of the desired sample, misappraises the artistic dynamics of Hip-Hop as culturally and sonically sample-based. *See* Joe Allen, *Backspinning Signifying,* to.the.quick, *at* http://to-the-quick.binghamton.edu/issue%202/sampling.html (last visited Apr. 8, 2005).

[143] Josh Norek, Comment, *"You Can't Sing Without the Bling": The Toll of Excessive Sample License Fees on Creativity in Hip-Hop Music and the Need For a Compulsory Sample License System,* 11 U.C.L.A. ENT. L. REV. 83, 89 (2004).

[144] *Id.* at 89–90.

[145] For a list of the sampled songs in the Beastie Boy's breakthrough album "Paul's Boutique," *see* Paul's Boutique Samples and References List, *at* http://www.moire.com/beastieboys/samples/index.php (Mar. 15, 2005).

[146] Bridgeport Music, Inc. v. Dimension Films, 383 F.3d 390, 401 (6th Cir. 2004), *amended, rehearing granted*, 2004 U.S. App. LEXIS 62877 (6th Cir. 2004).

[147] *See supra* text accompanying note 23.

[148] Robert M. Syzmanski, *Audio Pastiche: Digital Sampling, Intermediate Copying, Fair Use*, 3 UCLA ENT. L. REV. 271, 326 n.241 (1996).

[149] *Bridgeport Music, Inc.*, 383 F.3d at 400.

[150] Self, *supra* note 33, at 358.

[151] *Id.*

[152] The American Electronica revolution began in Detroit in the early 1980's with the "Belleville Three," Juan Atkins, Derrick May, and Kevin Saunderson, who helped birth the American incarnation of "Techno," a genre heavily influenced by the European group Kraftwerk (of "Popcorn" fame) and featuring heavy doses of electronic sounds. Today, the innumerable subgenres of Techno are cloaked together under the umbrella term "Electronica." *Techno Music*, Wikipedia: The Free Encyclopedia, *at* http://en.wikipedia.org/ wiki/Techno_music (last modified Apr. 5, 2005).

[153] *Id.*

[154] "Paperduck", *Techno Music 4*, *at* http://www.analogik.com/article_techno_4.asp (last visited Apr. 8, 2005).

[155] Kyle West, *Random Things that Piss Me Off!*, Studio 54, *at* http://www.geocities.com/westman420/ articlePissedOff.html (last visited Apr. 8, 2005).

[156] The Real Facts Contribution Company, *Techno (music)*, therfcc.org, *at* http://www.therfcc.org/techno-music-329006.html (last visited Apr. 8, 2005).

[157] *See* Downhill Battle, *3 Notes and Runnin*, *at* http://www.downhillbattle.org/3notes (last visited Apr. 7, 2005). For a general review of techniques, *see also* "Tweak", *The Secrets of Great Sounding Samples*, TweakHeadz Lab, *at* http://www.tweakheadz.com/Sampling_Tips.html (last visited Apr. 8, 2005).

[158] For a short pop journalism piece on Merzbow and "Noise Composition," *see* Ben Tausig, *The Taste of Noise*, *at* http://www.dustedmagazine.com/reviews/300 (last visited Apr. 8, 2005).

[159] *See* Downhill Battle, *supra* note 158.

[160] *See* Downhill Battle, *supra* note 158.

[161] *Id.*

[162] For instance, it was not until a final draft of this Note that the author discovered Syzmanski, *supra* note 25, an apparently lone endeavor into the analysis of whether a sample, edited beyond recognition, should constitute copyright infringement.

[163] *See Definition of Techno Music*, wordiQ.com, *at* http://www.wordiq.com/definition/Techno_music (last visited Apr. 8, 2005).

[164] 17 U.S.C. § 102(b) (2005).

[165] Madison, *supra* note 135, at 1656.

[166] For more background regarding "fair use", *see* text accompanying notes 127–137.

[167] No. 92-15655, 1993 U.S. App. LEXIS 78, at *52–53 (9th Cir. 1993).

[168] *Id.* In the context of a computer software infringement claim, "reverse engineering" is a technique where software code is disassembled "to see how it is constructed .... often requir[ing] making at least one [intermediate] copy of the program." The permissibility of reverse engineering is dependent upon (1) the purpose of the intermediate copying, and (2) the availability of other routes to accomplish

that purpose. In *Sega Enterprises* the "final version" the disputed code copying was held to contain only the unprotectable elements of the original program; moreover, the "final version" itself did not infringe – only the intermediate copies infringed, and they were excused as "fair use" because of their legitimate purpose. *Id.*

[169] *See supra* text accompanying notes 22–27.

[170] *See* Alice J. Kim, *Expert Testimony and Substantial Similarity: Facing the Music in (Music) Copyright Infringement Cases,* 19 COLUM.-VLA J.L. & ARTS 109, 118 (1994 / 1995); *supra* text accompanying notes 167–168.

[171] *Id.*

[172] *Id.*

[173] Nichols v. Universal Pictures Corp., 45 F.2d 119, 121 (2d Cir. 1930).

[174] The definition of "sonic idea" is the author's.

[175] The definition of "sonic expression" is the author's.

[176] In the author's conception, "sonic" ideas and expression are distinct from "musical" ideas and expression. Although there is a temptation to conceptually wed "musical" notes with their performance, a musical composition can exist even if never performed. Likewise, the waveforms and electrical currents that comprise "sounds" exist, at least in the abstract, even before a musician performing a musical composition causes the "sounds" to be audible. Sonic expression, then, even if its precise boundaries and definition can never be "fixed," can be rationally described as owing their existence to the underlying sonic ideas that make sound possible.

[177] Steve Mizrach, *An Ethnomusicological Investigation of Techno/Rave, at* http://www.fiu.edu/~mizrachs/housemus.html (last visited Apr. 8, 2005).

[178] *See supra* note 142.

[179] *See* Tausig, *supra* note 158 and accompanying text.

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