

Comments:

‘Cause the Samplers Gonna Sample: Should Courts Allow *De Minimis* Copying of Sound Recordings, or Should They Shake It Off?

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ABSTRACT

Sampling has been a widespread practice in the music industry for decades. But with the growth of sampling also came the growth of copyright infringement litigation between copyright owners and the songwriters who sampled their sound recordings.

When a plaintiff alleges an infringement of their sound recording copyright, courts differ in how they analyze whether two sound recordings are substantially similar. Courts in the Ninth Circuit use an extrinsic/intrinsic test, while courts in the Second and Eleventh Circuits use an ordinary listener test. Is there a point, though, where an instance of sampling becomes so unrecognizable that it is not substantial, but rather *de minimis*?

Until 2016, the rule on *de minimis* sampling, as stated by the Sixth Circuit, was clear: “Get a license, or do not sample.” Then, the Ninth Circuit created a circuit split by holding that Madonna’s alleged sampling of a horn hit in her song “Vogue” was *de minimis*, thereby

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allowing a *de minimis* exception to copyright infringement concerning sound recordings.

Allowing a *de minimis* exception for sampling not only comports with the congressional intent behind the Copyright Act but also recognizes that there comes a point at which a sample is so small that it embodies an uncopyrightable musical idea. Because such a point will vary from case to case, a novel test, termed the Elemental Test, can provide a helpful framework for *de minimis* analysis. The Elemental Test aggregates subjective factors which courts have used in determining a sample's recognizability. The Elemental Test also integrates objective musicological factors which dictate the uncopyrightability of a single note. When coupled with the Ninth Circuit's extrinsic/intrinsic test for substantial similarity, the Elemental Test allows songwriters to engage in *de minimis* sampling and allows courts to analyze sampling cases using both objective and subjective criteria.

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I. INTRODUCTION

In 2015, a jury found that Robin Thicke and Pharrell Williams infringed the composition copyright in Marvin Gaye’s “Got to Give It Up” when they wrote the now-infamous “Blurred Lines.”¹ Because of the Blurred Lines case, songwriters worried that mimicking or evoking an era could land them in court next.² However, after two subsequent cases involving Led Zeppelin and Katy Perry, music copyright plaintiffs may have more difficulty proving infringement with respect to short musical phrases or “chunks” of musical elements in combination.³

A different problem arises when a songwriter copies a “chunk” not from the musical composition underlying a sound recording, but from the sound recording itself.⁴ Consider the following hypothetical scenario:⁵

DJ is an amateur music producer who wants to include horn hits⁶ in one of their songs, but they do not have the time nor the resources to rent studio space, have musicians record the parts live, and mix and master the recordings afterward. DJ hears a horn hit that would fit perfectly in their song. They decide to isolate and sample a single instance of the horn hit in their digital audio workstation (“DAW”)⁷ to repurpose the horn hit for their song. They truncate the horn hit,

1. See Ben Sisario & Noah Smith, ‘Blurred Lines’ Infringed on Marvin Gaye Copyright, *Jury Rules*, N.Y. TIMES (Mar. 10, 2015), <https://nyti.ms/3ASAQdS>. The parties for both sides had disputed whether Thicke and Williams copied, among other things, keyboard parts, bass melodies, and “unusual” percussion choices. Williams v. Gaye, 885 F.3d 1150, 1161 (9th Cir. 2018).

2. See Sisario & Smith, *supra* note 1; Ben Sisario, *The ‘Blurred Lines’ Case Scared Songwriters. But Its Time May Be Up*, N.Y. TIMES (Mar. 24, 2020) [hereinafter Sisario, *Blurred Lines*], <https://nyti.ms/3s1UEar>. Indeed, a songwriter’s decision to reinterpret someone else’s music can be expensive. See Ben Sisario, ‘7 Rings’ Is a Hit for Ariana Grande, and a Knockout for Rodgers and Hammerstein, N.Y. TIMES (Mar. 19, 2019) <https://nyti.ms/3rXTddc> (“The song [‘7 Rings’ by Ariana Grande] is credited to a total of 10 writers. But two of them—Richard Rodgers and Oscar Hammerstein II—control 90 percent of the songwriting royalties . . .”).

3. See Sisario, *Blurred Lines*, *supra* note 2.

4. See *infra* Section II.C.

5. This scenario is based upon facts from VMG Salsoul, L.L.C. v. Ciccone, 824 F.3d 871, 875–76 (9th Cir. 2016).

6. A horn hit is a “single stab [of brass instruments], a sequence that consists of only a single chord or hit.” VMG Salsoul, L.L.C. v. Ciccone, No. CV 12-05967, 2013 U.S. Dist. LEXIS 184127, at *27 (C.D. Cal. Nov. 18, 2013) (internal quotations omitted).

7. A digital audio workstation (“DAW”) is a “software application that allows you to record, edit, and mix multiple sound sources on a computer.” *Glossary of Music Terms: Recording*, SPOTIFY (Feb. 21, 2019), <https://bit.ly/3nkR0HQ>; see Alex U. Case, *Digital Audio Workstation*, GROVE MUSIC ONLINE (Jan. 31, 2014), <https://bit.ly/3wNz8bE>. Examples of DAWs include Logic Pro, GarageBand, Ableton Live, and Avid Pro Tools. See *What Are Digital Audio Workstations (DAW)?*, RECORDING CONNECTION, <https://bit.ly/3qK1uCu> (last visited Nov. 15, 2021).

add a hint of delay⁸ and reverb,⁹ and then transpose¹⁰ the horn hit so it matches the key of their song. In DJ's song, the horn hits are less than one second each and occur six times. Months after DJ releases their song, the publisher of the sound recording embodying the original horn hit serves DJ a copyright infringement lawsuit. How could anyone recognize the horn hit considering the small size of the sample, the alterations applied to it, and the fact that it only occurred six times? "Haters gonna hate, hate, hate," DJ thinks to herself.¹¹ But with a lawsuit now before them, "shake it off" DJ simply cannot.¹²

A Sixth Circuit court would likely hold DJ's sampling a copyright infringement even though DJ altered the horn hit and used it infrequently in their own song.¹³ But a Ninth Circuit court might find that DJ's sample was *de minimis*: so trivial that the ordinary, reasonable listener would not discern that DJ lifted the horn hit in the first place.¹⁴

An approach that renders all instances of sampling per se infringements creates more problems than it solves.¹⁵ Instead, courts should allow a *de minimis* exception to infringement and weigh a set of subjective and objective factors to determine whether a sample qualifies as *de minimis*.¹⁶ This Comment titles such an approach the Elemental Test for *de minimis* sampling.¹⁷ The Elemental Test integrates factors from Sixth and Ninth Circuit jurisprudence with factors embodying musicological concepts.¹⁸

Part II of this Comment discusses the history of sampling within the context of music technology.¹⁹ Part II also introduces the fundamental concepts of music copyright law and the approaches courts take to analyze infringement cases involving sound recordings.²⁰ Lastly, Part II

8. Delay is a digital effect that produces repetitions of an audio source shortly after the source has first sounded. See Daniel Dixon, *Reverb vs. Delay: When to Use Each*, iZOTOPE (Oct. 20, 2020), <https://bit.ly/3HA4LKO>.

9. Reverb is a digital effect that emulates the natural reflections of a sound that occur in a given space, dependent in part upon the "surface materials" and the "size of the space." *Id.*

10. To transpose music is to change its pitch, "effected by raising or lowering all notes by the same interval." Jonathan Dunsby, *Transposition*, OXFORD REFERENCE, <https://bit.ly/30wBqAi> (last visited Nov. 16, 2021).

11. TAYLOR SWIFT, *Shake It Off*, on 1989 (Big Machine Records 2014).

12. *Id.*

13. See *infra* Section II.C.

14. See *infra* Section II.C.

15. See KEMBREW MCLEOD & PETER DiCOLA, CREATIVE LICENSE: THE LAW AND CULTURE OF DIGITAL SAMPLING 142-44 (Duke Univ. Press 2011).

16. See *infra* Section III.A.

17. See *infra* Section III.A.1.

18. See *infra* Section III.A.1.

19. See *infra* Sections II.A.1-2.

20. See *infra* Section II.B.

examines the circuit split regarding the *de minimis* exception to infringement of sound recording copyrights.²¹ Part III introduces the factors of the Elemental Test and applies them to the sample at issue in the Ninth Circuit’s *Ciccone* case.²² Then, Part III recommends that courts adopt the Ninth Circuit’s approach to substantial similarity analysis.²³

II. BACKGROUND

Music copyright lawsuits are rarely “open-shut case[s]”²⁴ in part because there are several ways to infringe a copyright holder’s rights in music. For example, a person may infringe a copyright holder’s rights by copying physical sheet music,²⁵ a part of the composition embodied in the sheet music,²⁶ a portion of a sound recording of a particular performance,²⁷ a compact disc embodying the sound recording,²⁸ or a combination of these media.²⁹ This Comment addresses issues arising out of sampling: the copying of a sound recording.³⁰ Therefore, a foundational exploration of sampling,³¹ music copyright law,³² and judicial approaches to analyzing sound recordings in infringement cases³³ provides useful background knowledge.³⁴

21. *See infra* Section II.C.

22. *See infra* Section III.A.

23. *See infra* Section III.B.

24. TAYLOR SWIFT, *Willow*, on EVERMORE (Republic Records 2020). *See infra* Sections II.B.3., II.C.

25. *See Quick Guide to Copyright*, MUSIC PUBLISHERS ASS’N OF THE U.S., <https://bit.ly/30Cav5G> (last visited Oct. 17, 2021) (calling printed music the “result of the efforts of many people” in a complex music publishing process and discussing the economic damage that illegal copying of sheet music causes to those people).

26. *See Newton v. Diamond*, 204 F. Supp. 2d 1244, 1246, 1251 (C.D. Cal. 2002) (involving a three-note sequence and the accompanying technical notations on the physical sheet music embodying the musical composition).

27. *See id.* at 1246 (involving the sound recording of the disputed three-note sequence).

28. *See About Piracy*, RECORDING INDUS. ASS’N OF AM., <https://bit.ly/3BSYaYq> (last visited Oct. 17, 2021) (discussing when the copying of a compact disc constitutes or does not constitute actionable music piracy).

29. *See* 17 U.S.C. § 102(a) (“Copyright protection subsists . . . in original works of authorship fixed in any tangible medium of expression . . .”).

30. *See infra* Sections II.C., III.

31. *See infra* Section II.A.

32. *See infra* Sections II.B.1–3.

33. *See infra* Section II.B.4.

34. *See infra* Part II.

A. *What is Sampling? A Brief History of the Technique in its Music Technology Context*

Sampling has subtly different meanings in the fields of music copyright and music technology.³⁵ In modern music copyright jurisprudence, the term “sampling” describes “the incorporation of a short segment of a musical recording into a new musical recording.”³⁶ Originating in the 1970s,³⁷ sampling remains prominent in today’s music industry because of a “sampling revolution” in the 1980s concurrent with the rise of hip-hop music.³⁸

Originally, disc jockeys³⁹ sampled musical recordings by scratching vinyl records on turntables.⁴⁰ However, today anyone can easily sample musical recordings using digital technology.⁴¹ Thus, the term sampling, as applied to music copyright litigation in the digital era and to this Comment, includes the practice of digitally sampling a musical recording.⁴²

In its music technology context, however, the term sampling may refer more broadly to the process of “digitally recording external sounds” for use in a synthesizer.⁴³ Such use could include the recording of a prior musical recording or the recording of “an enormous selection of timbres from instruments from all over the world,” including musical and non-

35. See *infra* Section II.A.2.

36. *Johnson v. Gordon*, 409 F.3d 12, 25 (1st Cir. 2005) (quoting *Newton v. Diamond*, 388 F.3d 1189, 1190 (9th Cir. 2004)).

37. See Jack Needham, *A History of Sampling and a Guide to Getting Them Cleared*, RED BULL (Nov. 15, 2019, 1:00AM), <https://win.gs/3DU9Tqv>.

38. See *Steinski Gives a Sampling History Lesson*, NPR (Oct. 22, 2008, 5:50 AM), <https://n.pr/3DVQntL>. For an in-depth discussion of the cultural and technological origins of sampling, see Henry Self, *Digital Sampling: A Cultural Perspective*, 9 U.C.L.A. ENT. L. REV. 347, 348–51 (2002).

39. A disc jockey, or “DJ,” is a performer who “creates continuous music for dancing by mixing and joining pre-recorded tracks . . .” *DJ*, GROVE MUSIC ONLINE (Jan. 31, 2014), <https://bit.ly/30DwJt>.

40. See Will Fulton, *Sampling and Sequencing, Hip Hop*, GROVE MUSIC ONLINE (July 10, 2012), <https://bit.ly/2YVZOtZ>.

41. See *Sampling*, THE OXFORD DICTIONARY OF MUSIC (6th ed. 2012).

42. See *Newton v. Diamond*, 388 F.3d 1189, 1192 (9th Cir. 2003); see also *Bridgeport Music, Inc. v. Dimension Films (Bridgeport II)*, 410 F.3d 792, 798 (6th Cir. 2005) (recognizing that the term “‘digital sampling’ . . . is a term of art well understood by . . . the music industry in general”).

43. Hugh Davies, *Synthesizer*, GROVE MUSIC ONLINE [hereinafter *Davies, Synthesizer*], <https://bit.ly/3FYMaaa> (last visited Oct. 13, 2021). A synthesizer is a musical instrument that “generate[s] sound electronically.” MARK VAIL, *THE SYNTHESIZER: A COMPREHENSIVE GUIDE TO UNDERSTANDING, PROGRAMMING, PLAYING, AND RECORDING THE ULTIMATE ELECTRONIC MUSIC INSTRUMENT 3* (Oxford Univ. Press 2014); see Kyle Devine, *Synthesizer*, GROVE MUSIC ONLINE (Jan. 31, 2014), <https://bit.ly/3paj3uC>.

musical sounds.⁴⁴ To adequately understand the musical possibilities of sampling and the resulting legal arguments, a concise history of the technological developments including and succeeding the synthesizer is instructive.⁴⁵

1. The Advent of Sound Synthesis

In 1963, Dr. Robert A. Moog invented one of the first physical synthesizers, the Moog modular synthesizer.⁴⁶ The Moog modular synthesizer is “a cabinet featuring a panel of knobs, levers, and wheels arranged into ‘modules’ that, when wired together, could produce any number of fantastic, unheard-of sounds.”⁴⁷ Recognizing that his invention was quite large and expensive, Dr. Moog later developed smaller, more portable versions of the Moog modular synthesizer.⁴⁸ Because of his inventions, the music industry remembers Dr. Moog for introducing the synthesizer into mainstream music technology.⁴⁹ Indeed, Moog instruments “ha[ve] a home in seemingly every studio”⁵⁰ For example, contemporary artists such as Alicia Keys, Kanye West, and Lady Gaga have used Moog instruments in their music.⁵¹

Following the invention of the Moog synthesizer, music technology continued to “digitaliz[e]” and “miniaturiz[e]” in the 1970s.⁵² The next major invention, the music computer, “offered numerous possibilities of modern studio software as well as a menu-driven user interface”⁵³ For example, in 1975, Cameron Jones and Sydney Alonso developed the Synclavier, a music workstation conceptually equivalent to “a computer-controlled Moog Modular synthesizer.”⁵⁴ Later iterations of the Synclavier featured a piano keyboard, which made sound synthesis more efficient by allowing keyboardists to play notes with one hand and

44. Davies, *Synthesizer*, *supra* note 43. The term “timbre” refers to the complex properties that distinguish the “tonal quality of a sound” from that of another sound. Murray Campbell, *Timbre*, GROVE MUSIC ONLINE (Jan. 20, 2001), <https://bit.ly/3DRHwZM>. For example, a trumpet and a human voice sounding the same pitch each have a different timbre. *See id.*

45. *See infra* Sections II.A.1–2.

46. *See* VAIL, *supra* note 43, at 17; *see also* Bernd Enders, *From Idiophone to Touchpad. The Technological Development to the Virtual Musical Instrument*, in *MUSICAL INSTRUMENTS IN THE 21ST CENTURY* 45, 47 (Bovermann et al. eds., 2017).

47. Jennifer Gersten, *The Moog Synthesizer’s Dynamic Musical History*, WQXR (Apr. 11, 2017), <https://bit.ly/3AOAK5m>.

48. *See id.*

49. *See* Sean Captain, *How Synthesizer Pioneer Bob Moog Brought Electronic Music to the Masses*, FAST COMPANY (May 23, 2019), <https://bit.ly/30IHtap>.

50. Gersten, *supra* note 47.

51. *See* Captain, *supra* note 49.

52. Enders, *supra* note 46, at 48.

53. *Id.*

54. VAIL, *supra* note 43, at 121.

simultaneously manipulate the control knobs with the other.⁵⁵ The same year, Kim Ryrie and Peter Vogel developed the Fairlight Computer Musical Instrument (“Fairlight CMI”), which included a larger, 88-note keyboard.⁵⁶

While developing the Fairlight CMI, Vogel discovered that a recorded snippet of a piano “sounded much more realistic than a synthesizer when played back at different pitches.”⁵⁷ Vogel coined the term “sampling” to describe the new practice of using a short recording of live sound to reproduce the same sound at different pitches.⁵⁸ Because of Vogel’s discovery, the Fairlight CMI represents the birth of the sampler,⁵⁹ an instrument “which has no sound of its own, but whose sounds are entirely derived from recordings.”⁶⁰

Using music computers such as the Synclavier, music producers could digitally create sounds normally made by a live, vibrating body.⁶¹ And with samplers such as the Fairlight CMI, music producers could create performances using digital manipulations of recorded, preexisting sounds.⁶² But what if a music producer wanted to create a performance of notes using one device and then communicate that performance to another device? Or, what if a music producer wished to record an exact arrangement of notes played on a synthesizer and store that arrangement as data to recreate the performance later? The Musical Instrument Digital Interface (“MIDI”) software standard makes both tasks possible.⁶³

2. MIDI and Modern Sampling

MIDI, invented in 1981, allows for controlled communication and storage of performance data and for compatibility between synthesizers, samplers, and computers.⁶⁴ With MIDI, a musician can “mechanical[ly] stor[e] . . . note information in order to trigger sounds with a clearly

55. See *In the Beginning*, SYNCLAVIER, <https://bit.ly/3pgckzp> (last visited Oct. 13, 2021).

56. See VAIL, *supra* note 43, at 72.

57. Will Brewster, *The Fairlight CMI: How Two Australians Took Sampling from Their Shed to the World Stage*, MIXDOWN (Nov. 5, 2022), <https://bit.ly/3DOeGcJ>; see VAIL, *supra* note 43, at 72.

58. See Brewster, *supra* note 57. The first iteration of the Fairlight CMI could only handle a sample length of one second. See *id.*

59. See JEAN-MICHEL RÉVEILLAC, *ELECTRONIC MUSIC MACHINES: THE NEW MUSICAL INSTRUMENTS* 19 (Wiley 2019).

60. Hugh Davies, *Sampler*, GROVE MUSIC ONLINE (Jan. 20, 2001) [hereinafter Davies, *Sampler*], <https://bit.ly/3DOQAi7>.

61. See ENDERS, *supra* note 46, at 48.

62. See *id.*

63. See *infra* Section II.A.2.

64. See ENDERS, *supra* note 46, at 48; David Burnand, *MIDI*, GROVE MUSIC ONLINE (Jan. 20, 2001), <https://bit.ly/3mW3bZW>; Tom Bateman, *How MIDI Changed the World of Music*, BBC (Nov. 28, 2012), <https://bbc.in/3eOjwME>.

defined point of onset and duration.”⁶⁵ Such triggering, or playback, of the sounds can occur simultaneously when a musician performs on a MIDI-compatible keyboard connected to a synthesizer.⁶⁶ Alternatively, a musician can use the MIDI-compatible keyboard to record a performance, store the performance as a standard MIDI file, and later use another compatible device (be it a different keyboard or synthesizer) to read the MIDI file and play back the performance embodied therein using different sounds.⁶⁷ Because storage and intercommunication of performance data creates new possibilities for multi-track recording, sound editing, and mixing, the invention of MIDI added a higher level of control to music synthesis, composition, and performance.⁶⁸

MIDI also furthered music technology in the 1990s from the use of physical synthesizers and music computers “to the development of surrogate software components running on basically every [personal] computer”⁶⁹ These modern software components “achieve a near-complete virtualization” of music production interfaces and processes that had previously been achievable using only hardware.⁷⁰ Additionally, as studios increasingly used technology and computers in the music-making process, software companies saw an opportunity to develop software that specifically allowed producers to “duplicate the look, sound, and feel” of musical instruments that were older, obsolete, or otherwise inaccessible.⁷¹

These software instruments, or “virtual” instruments, can work either as stand-alone programs⁷² or as plug-ins⁷³ within sequencer⁷⁴

65. ENDERS, *supra* note 46, at 49.

66. See GUERINO MAZZOLA ET AL., BASIC MUSIC TECHNOLOGY: AN INTRODUCTION 115 (Springer 2018) (“The movements of the human limbs (hands for keyboard players) are encoded and then communicated to a synthesizer that produces corresponding sound events.”).

67. See *id.* at 115–16; ENDERS, *supra* note 46, at 49.

68. See Burnand, *supra* note 64.

69. ENDERS, *supra* note 46, at 49.

70. *Id.* For example, Guitar Rig 6, an application by software company Native Instruments, digitally emulates the sounds, effects, and hardware user interfaces of vintage guitar amps. See *Guitar Rig 6*, NATIVE INSTRUMENTS, <https://bit.ly/3CoDZkP> (last visited Nov. 16, 2021).

71. Brandon Smith, *Virtual Instrument*, GROVE MUSIC ONLINE (May 25, 2016), <https://bit.ly/3INSU2B>; see RÉVEILLAC, *supra* note 59, at 133.

72. The term “stand-alone” “describes a hardware device or software program that is capable of operating by itself, with nothing else required.” *Standalone or Stand Alone*, SWEETWATER (Dec. 2, 2004, 12:00 AM), <https://bit.ly/3wFJYjI>.

73. Virtual instruments are available in different “plug-in” formats, one or more of which most sequencer software programs will support. Smith, *supra* note 71. See generally *Which Plug-in Format Do I Need for My DAW?*, SWEETWATER (Sept. 21, 2021, 5:20 PM), <https://bit.ly/3f9GEFL>, (listing DAWs, explaining plug-in formats, and charting compatibilities between the two).

software.⁷⁵ For example, as a stand-alone program, Native Instruments' KONTAKT 6 can function essentially as a "live performance instrument" by connecting the computer on which it is installed to a MIDI-compatible keyboard.⁷⁶ Alternatively, a composer could use KONTAKT 6 as a plug-in by inserting it into a sequencer program such as Apple's *Logic Pro X*.⁷⁷

Once a virtual instrument is configured in either stand-alone or plug-in mode, the instrument may function as a synthesizer by electronically generating a sound emulating the desired instrument, or as a sampler by drawing upon "a collection of sound samples of [the] instrument that is being emulated."⁷⁸ This collection of sound samples is called a sample library.⁷⁹

A sample library consists of individual samples of musicians playing physical instruments.⁸⁰ Each note in the instrument's range must be recorded so the listener can have the "illusion" of hearing a live instrument.⁸¹ If a composer wishes to repeat a note in succession, however, then using a single sample of that note will render the repetition "mechanical and unnatural."⁸² Therefore, each individual note must be recorded several times.⁸³ Each note must also be re-recorded to emulate different dynamics,⁸⁴ articulations,⁸⁵ and other performance

74. A "sequencer" is an electronic device that can create, store, or pre-set sequences of sound and then repeat or automate them. *See Sequencer*, THE OXFORD DICTIONARY OF MUSIC (6th ed. 2012); Hugh Davies, *Sequencer*, GROVE MUSIC ONLINE, <https://bit.ly/2YWce5v> (last visited Oct. 17, 2021). Most DAWs incorporate software sequencers. *See The Beginner's Guide to: DAWs*, MUSICRADAR (Nov. 11, 2008), <https://bit.ly/3qaHhVP>.

75. *See* Smith, *supra* note 71; RÉVEILLAC, *supra* note 59, at 135.

76. Adam Hanley et al., *KONTAKT 6 User Manual*, NATIVE INSTRUMENTS 4, <https://bit.ly/3lIS0ti> (last visited May 18, 2022). Connecting a computer to a MIDI-compatible instrument typically requires an audio interface, a device that "convert[s] . . . instrument signals into a format [that a] computer [or] software recognize[s]." *What Is an Audio Interface and Do You Need It?*, MLEDU (Feb. 16, 2021), <https://bit.ly/3c7Vvir>.

77. *See How to Insert Native Instruments Plug-ins in Logic Pro X*, NATIVE INSTRUMENTS, <https://bit.ly/3DbuWF2> (last visited Nov. 12, 2021).

78. Smith, *supra* note 71.

79. *See Comprehensive Guide to Virtual Instruments*, UJAM MUSIC TECHNOLOGY (Apr. 4, 2020), <https://bit.ly/3AUDu0W>.

80. *See* Nico Schuele, *What Are Virtual Instruments*, MEDIUM: PRAGMATIC SOUND (June 12, 2019), <https://bit.ly/3zIHcfm>.

81. *Id.*

82. *Id.*

83. *See id.* (containing an excerpt of a violin playing the same note several times). "[D]ifferent samples for the same note are called round robins." *Id.* (emphasis omitted).

84. "Dynamics" are "gradations of volume" in music. *Dynamics*, THE OXFORD DICTIONARY OF MUSIC (6th ed. 2012).

85. The term "articulation" denotes the expressive or structural manner by which a musician separates notes in performance. *See* Bryan White, *Articulation*, THE OXFORD COMPANION TO MUSIC (Alison Latham ed. 2011), <https://bit.ly/3qcoedy>; *see generally* Clive Brown, *Articulation Marks*, GROVE MUSIC ONLINE (Jan. 20, 2001),

techniques.⁸⁶ Because so many samples are recorded for each note in the instrument's range, a sample library can reach dozens if not hundreds of gigabytes in size.⁸⁷

Upon purchasing a sample library, the end-user obtains a license from the software company to use the samples for creating original compositions, but not for redistribution.⁸⁸ For example, a composer could purchase Native Instruments' *Stradivari Violin* sample library to permissibly create a sound recording emulating the performance of a live Stradivarius violin.⁸⁹ However, the composer could not re-package or re-sell the individual samples as a different commercial sample library.⁹⁰ Sample library creators seek to protect their work through their end-user licensing agreements because most meticulously crafted, high-end sample libraries require months of recording sessions, contain thousands of samples, and cost tens of thousands of dollars.⁹¹

In practice, a composer may use virtual instruments and sample libraries to create convincing orchestral renditions of compositions without hiring live musicians or bringing physical instruments into the studio.⁹² Suppose now that the sample a composer wishes to use originates not from a purchased sample library, but from a copyrighted sound recording containing the desired instrument or instruments.⁹³ Does illegal copying of the copyrighted sound recording occur if the composer

<https://bit.ly/3r5AClK> (discussing the different marks used in sheet music to indicate desired articulations to the performer).

86. See Schuele, *supra* note 80.

87. See *id.*

88. See *End User Software License Agreement: Garritan Personal Orchestra 5*, MAKEMUSIC, <https://bit.ly/3BXZ1aA> (last visited Oct. 16, 2021); *Logic Pro X Software License Agreement*, APPLE § 2.B., <https://apple.co/3vnmUFV> (last visited Oct. 17, 2021); *End User License Agreements*, NATIVE INSTRUMENTS § 3.7, <https://bit.ly/3aKrQez> (last visited Oct. 17, 2021).

89. See Antti Oikarinen, *Stradivari Violin*, NATIVE INSTRUMENTS, <https://bit.ly/30uJMI1> (last visited Oct. 16, 2021) (“‘STRADIVARI VIOLIN’ is a virtual instrument made with real-world recordings of Antonio Stradivari’s ‘Vesuvius’ violin, built in 1727.”).

90. See, e.g., *End User Software License Agreement: Garritan Personal Orchestra 5*, *supra* note 88 (prohibiting the end-user of the sample library from “duplicat[ing], copy[ing], distribut[ing], transfer[ing], upload[ing] or download[ing], trad[ing], loan[ing], reissu[ing] or resell[ing] [the sample] library”).

91. See Josh Davies, *Examining the Role of Orchestral Sample Libraries in Modern Production*, HAPPYMAG (May 5, 2020) [hereinafter Josh Davies], <https://bit.ly/3DUlUMB>; *supra* notes 88, 90. For an example of a high-end sample library, see *KOMLETE 13 ULTIMATE Collector's Edition*, NATIVE INSTRUMENTS, <https://bit.ly/3aNdHqA> (last visited Oct. 16, 2021) (listing the aggregate, unbundled price of the products included in the Komplete 13 Ultimate production suite of “flagship synths, sampled instruments, effects, and groundbreaking orchestral libraries” at \$20,349).

92. See Josh Davies, *supra* note 91.

93. See *infra* Section II.C.

decides to appropriate a single horn hit from the sound recording?⁹⁴ Answering this question requires an interlude to determine what constitutes legal, and illegal, copying.⁹⁵

B. *An Introduction to Music Copyright Law*

Copyright “literally means the right to copy,” but it also refers to the body of law that grants musicians, among other creators, certain exclusive rights over their work.⁹⁶ A specific branch of copyright law applies to sampling because sampling implicates the category of sound recordings defined in the Copyright Act.⁹⁷ This Section provides a brief overview of the foundations of copyright law and its expansion into the realm of music and sound recordings.⁹⁸

1. The Constitution and The Copyright Act

The Framers of the United States Constitution, seeking a “uniform federal law for copyrights,”⁹⁹ conferred upon Congress the power “[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings”¹⁰⁰ The most recent comprehensive federal copyright legislation is the Copyright Act of 1976 (“1976 Act”).¹⁰¹ Section 102(a) of the 1976 Act provides that a work of authorship must be (1) “original,” and (2) “fixed in any tangible medium of expression”¹⁰²

As enacted, the 1976 Act did not clearly define originality.¹⁰³ Later, in *Feist Publications v. Rural Telephone Service*, the Supreme Court defined the term “original” to mean “independently created by the author (as opposed to copied from other works), and . . . possess[ing] at least some minimal degree of creativity.”¹⁰⁴ Further, the Court held that only the author’s original components of a work qualify for copyright

94. See, e.g., *VMG Salsoul, L.L.C. v. Ciccone*, 824 F.3d 871, 874 (9th Cir. 2016) (involving alleged sampling by defendant Madonna of plaintiff’s horn hit).

95. See *infra* Section II.B.

96. *U.S. Copyright Office Definitions*, COPYRIGHT.GOV, <https://bit.ly/3aMd8Uh> (last visited Oct. 17, 2021).

97. See 17 U.S.C. § 101.

98. See *infra* Sections II.B.1–II.B.3.

99. CRAIG JOYCE ET AL., COPYRIGHT LAW 19 (11th ed. 2020) (emphasis omitted).

100. U.S. CONST. art. I, § 8, cl. 8.

101. See *1950-2000*, COPYRIGHT.GOV, <https://bit.ly/3j7jC4E> (last visited Oct. 17, 2021). Congress has since amended the Copyright Act many times. See 1 NIMMER ON COPYRIGHT § 2.01 (2022).

102. 17 U.S.C. § 102(a).

103. See Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541, 2541–44 (1976) (codified as amended at 17 U.S.C. § 101).

104. *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 345 (1991).

protection.¹⁰⁵ Thus, to the extent that a work “owes its origin to [its] author,” it conceivably qualifies for copyright protection even if it is nearly identical to a prior work so long as it possesses some “distinguishable variation.”¹⁰⁶

However, despite the originality of a work, any ideas contained therein are “released into the public domain.”¹⁰⁷ Copyright protection extends not to ideas, but merely to the method of expressing those ideas.¹⁰⁸ According to the Supreme Court, the “essence” of ideas “consists only in their *statement*. [The statement] alone is what is secured by the copyright.”¹⁰⁹ Congress codified this axiomatic “idea/expression dichotomy” in § 102(b) of the 1976 Act.¹¹⁰ Section 102(b) denies protection to any “idea, procedure, process, system, method of operation, concept, principle, or discovery,” regardless of the method of expression.¹¹¹

The second requirement of § 102(a) is that a work be “fixed” in a “tangible medium of expression” from which the work can be “perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”¹¹² Further, the work must be perceivable for more than a “transitory” period to be sufficiently fixed.¹¹³

The term “[w]ritings”¹¹⁴ originally conferred the right to reproduce and sell copies of only literary works, such as books.¹¹⁵ Today, after several legislative revisions, the 1976 Act extends protection to eight categories of works, including sound recordings.¹¹⁶

2. The Copyright Act and Sound Recordings

The Copyright Act of 1909 (“1909 Act”), the predecessor to the 1976 Act, did not protect sound recordings.¹¹⁷ Rather, the 1909 Act only

105. *See id.* at 348.

106. 1 NIMMER ON COPYRIGHT § 2.01 (2022).

107. JOYCE ET AL., *supra* note 99, at 117; *see Baker v. Selden*, 101 U.S. 99, 104 (1879). The public domain is the “universe” of works that are unprotected by intellectual property rights. *Public Domain*, BLACK’S LAW DICTIONARY (11th ed. 2019).

108. *See JOYCE ET AL.*, *supra* note 99, at 117; *see also Baker*, 101 U.S. at 104.

109. *Baker*, 101 U.S. at 104 (emphasis added).

110. *See* Richard H. Jones, *The Myth of The Idea/Expression Dichotomy in Copyright Law*, 10 PACE L. REV. 551, 551 (1990); 17 U.S.C. § 102(b).

111. 17 U.S.C. § 102(b).

112. *Id.* § 102(a).

113. *Id.* § 101.

114. U.S. CONST. art. I, § 8, cl. 8.

115. *See JOYCE ET AL.*, *supra* note 99, at 4.

116. *See* 17 U.S.C. § 102(a). *See id.* for a list of the other protected categories of works.

117. *See* Copyright Act of 1909, 35 Stat. 1075, 1076–77 (1909) (current version at 17 U.S.C. §§ 101–1511).

protected musical compositions.¹¹⁸ By 1971, however, piracy of phonograph records and tapes reached an annual volume valued at more than \$100 million.¹¹⁹ Even if one paid the statutory mechanical royalty to use the underlying musical composition, piracy of the record still denied income to the manufacturer of the record and royalties to the musicians whose performances were embodied in the sound recording.¹²⁰ Congress responded to the lack of a remedy for the unauthorized reproduction of sound recordings by enacting the Sound Recording Act of 1971.¹²¹ This Act extended copyright protection to sound recordings fixed on and after January 1, 1975, but limited the copyright owner's exclusive rights to merely reproduction and distribution of the sound recording.¹²² The Digital Performance Right in Sound Recordings Act of 1995 added the right to perform a work publicly "by means of a digital audio transmission."¹²³

According to the current 1976 Act, a sound recording "result[s] from the fixation of a series of musical, spoken, or other sounds"¹²⁴ As with the other categories of protected works, sound recordings must be original, and they must be fixed in a tangible medium of expression,¹²⁵ most often a phonorecord¹²⁶ such as a compact disc or cassette.

Assuming a sound recording meets the originality and fixation requirements, certain exclusive rights vest in the copyright owner.¹²⁷ The copyright owner may reproduce and distribute the sound recording in copies or phonorecords, create derivative works, and perform the work publicly "by means of a digital audio transmission."¹²⁸ However, § 114 of the 1976 Act provides a limitation:

The exclusive rights of the owner of copyright 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, even though such sounds imitate or simulate those in the copyrighted sound recording.¹²⁹

118. *See id.*

119. *See* H.R. REP. NO. 92-487 (1971), *reprinted in* 1971 U.S.C.C.A.N. 1566, 1567.

120. *See id.*

121. *See id.*; Sound Recording Act of 1971, Pub. L. No. 92-140, 85 Stat. 391, 391 (1971).

122. *See* 85 Stat. at 391-92.

123. Digital Performance Right in Sound Recordings Act of 1995, Pub. L. No. 104-39, 109 Stat. 336, 337 (1995).

124. 17 U.S.C. § 101.

125. *See id.* § 102(a).

126. *See id.* § 101.

127. *See id.* § 106.

128. *Id.* §§ 106, 114.

129. *Id.* § 114(b).

It is unclear whether this provision prevents the copyright holder from making a new sound recording that mimics the original or allows the copyright holder to sample from their own recording.¹³⁰ Accordingly, this provision is one of the subjects of the current circuit split.¹³¹ To properly orient the circuit split within the copyright infringement framework, an overview of the elements of copyright infringement is first due.¹³²

3. The Elements of Copyright Infringement

Copyright infringement occurs when a person exercises any of the exclusive rights of a copyright holder without permission.¹³³ In an infringement action, the plaintiff must prove two elements: “(1) ownership of a valid copyright, and (2) copying of constituent elements of the work that are original.”¹³⁴ Two underlying components must be proven under the second element.¹³⁵ First, because it is possible that the defendant could independently create a work similar to the plaintiff’s, the defendant must have had access to the plaintiff’s work.¹³⁶ Second, the defendant’s work must be substantially similar to the plaintiff’s.¹³⁷ In analyzing substantial similarity, the circuit courts take different approaches.¹³⁸

4. Approaches to Substantial Similarity Analysis in Music Copyright Cases

Courts have devised a variety of tests to determine when two works are substantially similar.¹³⁹ The Ninth Circuit uses the extrinsic/intrinsic test, the Sixth Circuit uses a filter approach, and the Second and Eleventh Circuits use an ordinary or lay listener test.¹⁴⁰

In the Ninth Circuit, courts use the extrinsic/intrinsic test, a two-part analysis.¹⁴¹ The first part, the extrinsic test, asks whether the two works

130. See 2 NIMMER ON COPYRIGHT § 8.05[A] (2022).

131. See *infra* Section II.C.

132. See *infra* Section II.B.3.

133. See 17 U.S.C. § 501.

134. Feist Publ’ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 361 (1991).

135. See 4 NIMMER ON COPYRIGHT § 13D.02 (2022).

136. See *id.* § 13D.05.

137. See *id.* § 13.03.

138. See *infra* Section II.B.4.

139. See, e.g., *Batiste v. Najm*, 28 F. Supp. 3d 595, 602–10 (E.D. La. 2014) (summarizing several courts’ approaches); 2 NIMMER ON COPYRIGHT § 13.03[A].

140. See *Batiste*, 28 F. Supp. 3d at 602, 605; *Arnstein v. Porter*, 154 F.2d 464, 468 (2d Cir. 1946); *Saregama India Ltd. v. Mosley*, 687 F. Supp. 2d 1325, 1337 (S.D. Fla. 2009).

141. See *Batiste*, 28 F. Supp. 3d at 602 (citing *Sid & Marty Krofft TV Prods. v. McDonald’s Corp.*, 562 F.2d 1157, 1164 (9th Cir. 1977)).

objectively share similarities of “specific expressive elements.”¹⁴² A limiting principle of this test is that a combination of unprotectable elements may be protected when those elements “are numerous enough and their selection and arrangement original enough” to render the combination original.¹⁴³ Appropriately, to more thoroughly discern the objective similarities of two sound recordings, courts allow for “analytic dissection” and expert testimony.¹⁴⁴

The expert each party employs is usually a forensic musicologist,¹⁴⁵ an expert in the academic field of music.¹⁴⁶ A musicologist may “critically listen” to and transcribe the two recordings,¹⁴⁷ and they may also conduct a spectrogram¹⁴⁸ analysis of the recordings to uncover “digital fingerprints” of sampling.¹⁴⁹ Because musicological analysis is scientifically rigorous,¹⁵⁰ the Ninth Circuit defers to musicologists when objectively analyzing the similarity between sound recordings.¹⁵¹

The second part of the Ninth Circuit’s substantial similarity analysis, the intrinsic test, is “more subtle” than the extrinsic test because it does not depend on objective components.¹⁵² Instead, the intrinsic test is subjective, asking whether there is substantial similarity in the “total concept and feel”¹⁵³ of the two works from the perspective of the “ordinary reasonable person”¹⁵⁴ without expert assistance.¹⁵⁵ The jury

142. *Skidmore v. Zeppelin*, 952 F.3d 1051, 1064 (9th Cir. 2020) (citing *Cavalier v. Random House, Inc.*, 297 F.3d 815, 822 (9th Cir. 2002)).

143. *Batiste*, 28 F. Supp. 3d at 603–04 (internal quotations omitted) (quoting *Satava v. Lowry*, 323 F.3d 805, 811 (9th Cir. 2003)).

144. *Krofft*, 562 F.2d at 1164.

145. See Andy Hermann, *Beyond ‘Blurred Lines’: How Forensic Musicology Is Altering Pop’s Future*, ROLLING STONE (Apr. 4, 2018, 5:13 PM), <https://bit.ly/3q8Mdug> (“When a music copyright lawsuit is filed, both parties will usually call in a forensic musicologist to provide detailed analysis of the two songs in question.”).

146. See *What Is Musicology?*, AM. MUSICOLOGICAL SOC’Y, <https://bit.ly/3r2KxBN> (last visited Jan. 8, 2021).

147. Talia Smith-Muller, *Forensic Musicologists Need to Know These 5 Things*, BERKLEE ONLINE: TAKENOTE, <https://bit.ly/3zK826z> (last visited Jan. 8, 2021); see *Frisby v. Sony Music Ent.*, No. CV 19-1712, 2021 U.S. Dist. LEXIS 51218, at *54 (C.D. Cal. Mar. 11, 2021).

148. A spectrogram is a graphical representation of the frequencies that make up a sound. MAZZOLA ET AL., *supra* note 66, at 24–25.

149. Herman, *supra* note 145; see *Frisby*, 2021 U.S. Dist. LEXIS 51218, at *54.

150. See Herman, *supra* note 145.

151. See *Swirsky v. Carey*, 376 F.3d 841, 847–48 (9th Cir. 2004) (holding that district court erred because it conducted an “incomplete and distorted musicological analysis”); *accord* *Copeland v. Bieber*, No. 2:13cv246, 2016 U.S. Dist. LEXIS 178817, at *18–19 (E.D. Va. Sept. 8, 2016) (excluding the analysis of plaintiff’s expert, a recording engineer, when the defendant’s expert was a musicologist).

152. *Sid & Marty Krofft TV Prods. v. McDonald’s Corp.*, 562 F.2d 1157, 1164 (9th Cir. 1977).

153. See 4 NIMMER ON COPYRIGHT § 13.03[A][1][c] (2022) (discussing and criticizing the usage of the phrase “total concept and feel”).

154. *Krofft*, 562 F.2d at 1164.

makes the ultimate determination as to whether two sound recordings are intrinsically similar.¹⁵⁶

The Sixth Circuit uses a filter approach to determine substantial similarity, although not for sound recordings.¹⁵⁷ Under the filter approach, the court first filters out the unoriginal elements of the works to determine what was protected by copyright.¹⁵⁸ Then, the determination of whether the two works are substantially similar becomes a question of fact.¹⁵⁹ Before the Sixth Circuit abrogated the filter approach for sound recordings, the standard for the jury was whether an ordinary listener would consider the works substantially similar, despite the fact that an ordinary listener would not ordinarily listen to a filtered version of either work.¹⁶⁰

In contrast, both the Second and Eleventh Circuits use an ordinary or lay listener test to determine substantial similarity, without an extrinsic component.¹⁶¹ The Eleventh Circuit test asks if the average lay person would recognize the copying.¹⁶² Where only a small amount of “fragmented literal similarity”¹⁶³ exists, a substantial similarity may be found if the “fragmented copy is important to the copyrighted work, and of sufficient quantity”¹⁶⁴ The Second Circuit test more simply relies on the “response of the ordinary lay hearer” and casts away expert testimony as “irrelevant.”¹⁶⁵

Notwithstanding the methods for determining substantial similarity, there must come a point at which the amount of copying is so small that it is “simply a *de minimis* fragment” of the original work and renders

155. See *Skidmore v. Zeppelin*, 952 F.3d 1051, 1064 (9th Cir. 2020).

156. See *Swirsky v. Carey*, 376 F.3d 841, 845 (9th Cir. 2004) (“For the purposes of summary judgment, only the extrinsic test is important because the subjective question whether works are intrinsically similar must be left to the jury.”).

157. See *Batiste v. Najm*, 28 F. Supp. 3d 595, 605 (E.D. La. 2014) (summarizing the Sixth Circuit filter approach); *Bridgeport Music, Inc. v. UMG Recordings, Inc.*, 585 F.3d 267, 274–75 (6th Cir. 2009). Compare *Bridgeport*, 585 F.3d at 274–77 (applying the filter approach to musical compositions), with *infra* Section II.C. (describing the Sixth Circuit’s bright-line rule against sampling, abrogating the need for a substantial similarity analysis).

158. See *Bridgeport*, 585 F.3d at 274.

159. See *id.* at 275.

160. See *id.*; *supra* note 157; *c.f. supra* notes 153–155 and accompanying text.

161. See *Arnstein v. Porter*, 154 F.2d 464, 468 (2d Cir. 1946); *Saregama India Ltd. v. Mosley*, 687 F. Supp. 2d 1325, 1337 (S.D. Fla. 2009).

162. *Saregama*, 687 F. Supp. 2d at 1337.

163. 4 NIMMER ON COPYRIGHT § 13.03[A][2] (2022).

164. *Saregama*, 687 F. Supp. 2d at 1337–38 (quoting *Palmer v. Braun*, 287 F.3d 1325, 1330 (11th Cir. 2002)).

165. *Arnstein*, 154 F.2d at 468.

neither work substantially similar to the other.¹⁶⁶ Whether such a point exists is the subject of a split between the Sixth and Ninth Circuits.¹⁶⁷

C. I'm Just Gonna Split: The Ninth Circuit Shakes Off the Sixth Circuit's Bright-Line Rule

Until 2016,¹⁶⁸ the Sixth Circuit cautioned musicians against unauthorized sampling with its bright-line rule: "Get a license, or do not sample."¹⁶⁹ However, a Ninth Circuit decision in 2016 created a circuit split by allowing a *de minimis* exception to copyright infringement with respect to sound recordings.¹⁷⁰

Before 2016, the Sixth Circuit's bright-line rule in *Bridgeport Music, Inc. v. Dimension Films*¹⁷¹ declared the copying of *any* length of a sound recording an infringement.¹⁷² *Bridgeport* concerned the sampling of three notes from "Get Off Your Ass and Jam" ("Get Off") in the rap song "100 Miles and Runnin'" ("100 Miles").¹⁷³ According to the plaintiff's expert, the sampled chord from "Get Off" was two seconds long.¹⁷⁴ Further, in "100 Miles," the "Get Off" sample occurred five times, looping 14 to 16 times during each occurrence and making each occurrence approximately seven to eight seconds long.¹⁷⁵ Despite the district court's finding that the sample from "Get Off" was "not even recognizable to a lay observer,"¹⁷⁶ the Sixth Circuit held that the defendant infringed the plaintiff's copyright.¹⁷⁷

The court reasoned that only the owner of the sound recording has the exclusive right to sample.¹⁷⁸ The court relied on § 114 of the 1976 Act, which says that a copyright holder's rights 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, even though

166. 2 NIMMER ON COPYRIGHT § 8.01 (2022).

167. See *infra* Section II.C.

168. See Bill Donahue, *9th Circ. Throws Down the Gauntlet on Music Sampling*, LAW360 (June 4, 2016, 5:11 PM), <https://bit.ly/3n0rcPL>.

169. *Bridgeport Music, Inc. v. Dimension Films (Bridgeport II)*, 410 F.3d 792, 801 (6th Cir. 2005). See Donahue, *supra* note 168; MCLEOD & DiCOLA, *supra* note 15, at 141.

170. See *VMG Salsoul, L.L.C. v. Ciccone*, 824 F.3d 871, 886 (9th Cir. 2016).

171. See *Bridgeport II*, 410 F.3d at 801.

172. See Donahue, *supra* note 168. ("A few district courts outside of the Sixth Circuit have refused to adopt it[s] rule], but if you were a copyright lawyer trying to explain the legality of sampling to an artist, you had to cite *Bridgeport* and counsel caution.")

173. See *Bridgeport II*, 410 F.3d at 795.

174. *Bridgeport Music, Inc. v. Dimension Films (Bridgeport I)*, 230 F. Supp. 2d 830, 841 (M.D. Tenn. 2002).

175. See *id.*

176. *Id.* at 842.

177. *Bridgeport II*, 410 F.3d at 805.

178. See *id.* at 801.

such sounds imitate or simulate those in the copyrighted sound recording.”¹⁷⁹ The court found that Congress’s use of the word “entirely” implied that the copyright holder’s rights only extend to making or duplicating a sound recording consisting *partially* of an independent fixation of other sounds and *partially* of sounds from the original sound recording (i.e., samples).¹⁸⁰ In adopting a bright-line rule against sampling by anyone other than the copyright holder, the court sought to achieve judicial efficiency and avoid adopting a *de minimis* exception to infringement.¹⁸¹

The Ninth Circuit disagreed in the case of *VMG Salsoul, L.L.C. v. Ciccone*.¹⁸² The dispute in *Ciccone* involved alleged sampling and digital manipulation by Madonna and her producer of a less-than-one-second horn hit.¹⁸³ The Ninth Circuit held that Madonna’s sampling was *de minimis* and that the *de minimis* exception applies to sound recording infringement actions, creating a split from the Sixth Circuit.¹⁸⁴

The court reasoned that, although the evidence showed copying of the horn hit, the defendant manipulated the sample in such a way that “a reasonable juror could not conclude that an average audience would recognize the [sample].”¹⁸⁵ To arrive at its holding, the court conducted a *de minimis* analysis considering four factors: (1) the manipulations to the horn hit; (2) the length of the sample; (3) the frequency of occurrences of the sample; and (4) the difficulty in identifying the sample.¹⁸⁶

First, the court considered the manipulations to the horn hit.¹⁸⁷ The court reasoned that the defendant’s appropriation was unrecognizable because Madonna’s producer, Shep Pettibone, “isolated the horns by filtering out the other instruments playing at the same time.”¹⁸⁸ The court elaborated that the defendant also made the appropriation unrecognizable by transposing the horn hit, “cleaning up the attack slightly,” and “overlaying it with other sounds and effects.”¹⁸⁹ Second, the court considered the length of the sample, stating that the appropriation of the horn hit was unrecognizable because the sample itself was “very short—less than a second.”¹⁹⁰

179. *Id.* at 800–01 (quoting 17 U.S.C. § 114(b)).

180. *Id.*

181. *See id.* at 802.

182. *See VMG Salsoul, L.L.C. v. Ciccone*, 824 F.3d 871, 874 (9th Cir. 2016).

183. *See id.*

184. *See id.*

185. *Id.* at 880.

186. *See id.* at 879–80.

187. *Id.* at 879.

188. *Id.*

189. *Id.*

190. *Id.* at 880.

Third, the court considered the frequency with which the horn hit occurred in defendant Madonna's song "Vogue."¹⁹¹ The original horn hit occurs in the plaintiff's song, "Love Break," as a single hit 27 times and as a double hit 23 times.¹⁹² However, the horn hit occurs in the radio edit version of "Vogue" only once as a single hit, three times as a double hit, and once as a "breakdown" version of the hit.¹⁹³ Further, in the compilation version, the horn hit occurs only once as a single hit and five times as a double hit.¹⁹⁴ The court reasoned, therefore, that the horn hit's appropriation was "easy to miss" because it occurred much less frequently in "Vogue" than in "Love Break."¹⁹⁵

Finally, in light of the idea that "if the public does not recognize the appropriation, then the copier has not benefitted from the original artist's expressive content[.]"¹⁹⁶ the court noted that the plaintiff's expert witness, a musicologist, "originally *misidentified* the source of the sampled double horn hit."¹⁹⁷ At first, the musicologist concluded that the defendant sampled both the single and double horn hit.¹⁹⁸ However, after listening to the horn hits isolated from the other instruments in the sound recording, the musicologist later concluded that the defendant sampled only the single horn hit, and then used that sample to make the double horn hit.¹⁹⁹ The court reasoned that "[a]n average audience would not do a better job" recognizing the horn hit because "a highly qualified and trained musician [could not accurately discern] which parts of the song had been copied."²⁰⁰ Therefore, the court found the defendant's sampling *de minimis*.²⁰¹

The Ninth Circuit next turned to the issue of whether a *de minimis* exception to copyright infringement should apply to sound recordings.²⁰² Using statutory analysis, the court stated that neither the 1976 Act's definition of "sound recording,"²⁰³ its provision listing the categories of protected works,²⁰⁴ nor its provision listing the exclusive rights of copyright owners,²⁰⁵ "suggest[] differential treatment of *de minimis*

191. *See id.*

192. *See Ciccone*, 824 F.3d at 875.

193. *See id.*

194. *See id.*

195. *See id.* at 880 ("The horn hit occurs only a few times in *Vogue*.").

196. *Id.* at 881.

197. *Id.* at 880.

198. *See id.*

199. *See id.*

200. *Id.*

201. *See id.*

202. *See Ciccone*, 824 F.3d at 880.

203. *See id.* at 882 (citing 17 U.S.C. § 101).

204. *See id.* at 881 (citing 17 U.S.C. § 102).

205. *See id.* at 882 (citing 17 U.S.C. § 106).

copying of sound recordings compared to [other works].”²⁰⁶ The nexus of the split between the Ninth and Sixth Circuits, however, lies in their differing interpretations of § 114(b) of the 1976 Act.²⁰⁷

The Sixth Circuit interpreted § 114(b) to allow only the copyright holder of a sound recording to sample from his own recording, calling such an interpretation an “*implicit expansion* of rights [within] Congress’[s] statement of an *express limitation* on rights.”²⁰⁸ The Ninth Circuit disagreed, calling such an interpretation a “fallacy,”²⁰⁹ and clarified that the express limitation is only that “[a] new recording that mimics the copyrighted recording is not an infringement, even if the mimicking is very well done, so long as there was no actual copying.”²¹⁰

The Ninth Circuit then looked to the legislative history of the 1976 Act, opining that the sampling at issue in *Ciccone* comported with Congress’s intended limitations on a copyright holder’s rights with respect to sound recordings.²¹¹ The court cited a 1976 House Report (the “House Report”), which provided that § 114(b) of the 1976 Act, among other sections, intended to limit rather than expand copyright owners’ exclusive rights found in § 106.²¹² Further, the House Report stated that “infringement takes place whenever all or *any substantial portion* of the actual sounds [in] a copyrighted sound recording are reproduced in phonorecords”²¹³ The court thus reasoned that the phrase “all or any substantial portion” shows that Congress intended a *de minimis* exception for sound recordings because *de minimis* copying is, by definition, less than substantial.²¹⁴

The Ninth Circuit acknowledged that its decision would create a circuit split and that doing so could disrupt the realm of copyright.²¹⁵ However, the court also acknowledged that avoiding a circuit split “cannot override [the court’s] independent duty to determine congressional intent.”²¹⁶ Pointing to several district court opinions which

206. *Id.*

207. *See id.* at 884–85; *Bridgeport Music, Inc. v. Dimension Films (Bridgeport II)*, 410 F.3d 792, 800–01 (6th Cir. 2005).

208. *Ciccone*, 824 F.3d at 883; *see supra* notes 178–180 and accompanying text (explaining the Sixth Circuit’s reasoning).

209. *Ciccone*, 824 F.3d at 884.

210. *Id.* at 883.

211. *See id.*

212. *See id.* (citing H.R. REP. NO. 94-1476, at 61 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5674).

213. *Id.* (quoting H.R. REP. NO. 94-1476, at 106 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5721).

214. *Id.* at 884.

215. *See id.* at 886.

216. *Id.*

disagreed with *Bridgeport*, the Ninth Circuit ultimately asserted that its holding would put the court “in well-charted territory.”²¹⁷

III. ANALYSIS

This Comment recommends that courts adopt the Elemental Test for *de minimis* sampling as a threshold inquiry before engaging in a substantial similarity analysis.²¹⁸ If a court determines that an instance of sampling is more than *de minimis*, the court should then use the Ninth Circuit’s extrinsic/intrinsic test for substantial similarity.²¹⁹

Two main points underlie this Comment’s recommendations. First, *de minimis* sampling should be allowed because some samples are so small that they embody uncopyrightable musical ideas.²²⁰ Because each case will be different, this section (1) proposes the Elemental Test for analyzing whether the sampling of a copyrighted sound recording is *de minimis*;²²¹ and (2) analyzes the *Ciccone* horn hit using the Elemental Test.²²² Second, courts should use the Ninth Circuit’s extrinsic/intrinsic test for substantial similarity which allows musicologists’ expert testimony in cases involving sound recordings.²²³

A. Courts Should Allow the De Minimis Exception to Infringement with Respect to Sound Recordings

Courts should allow the *de minimis* exception to infringement concerning sound recordings.²²⁴ The 1976 Act does not mandate treating sound recordings differently from other protected works with regard to the *de minimis* principle.²²⁵ Moreover, such an interpretation of the 1976 Act aligns well with the text of § 114(b).²²⁶ Congress did not intend § 114(b) to expand the rights of the copyright holder in a sound recording.²²⁷ Additionally, allowing *de minimis* sampling comports with the general principle that *de minimis* copying cannot also be substantial.²²⁸

217. *Id.*

218. *See infra* Section III.A.1.

219. *See infra* Section III.A.2.

220. *See infra* Section III.A.

221. *See infra* Section III.A.1.

222. *See infra* Section III.A.2.

223. *See supra* Section II.C.

224. *See supra* notes 202–214 and accompanying text.

225. *See VMG Salsoul, L.L.C. v. Ciccone*, 824 F.3d 871, 884–85 (9th Cir. 2016); *Bridgeport Music, Inc. v. Dimension Films (Bridgeport II)*, 410 F.3d 792, 800–01 (6th Cir. 2005).

226. *See supra* Sections II.B.3, II.C.

227. *See supra* Sections II.B.3, II.C.

228. *See supra* Section II.C.

Further, there comes a blurred line at which a sample is small enough that it becomes an uncopyrightable idea and therefore *de minimis*.²²⁹ Although it is well-settled that an idea is uncopyrightable,²³⁰ it has been difficult for courts to articulate such a line because music “does not necessarily communicate separately identifiable ideas.”²³¹ For example, courts have disagreed as to how many notes could garner copyright protection. The Ninth Circuit held that a combination of three notes was not protectable,²³² and the Central District of California held that a combination of eight notes was not protectable,²³³ but the Southern District of New York held that a combination of four notes *was* protectable.²³⁴

Nevertheless, courts seem to agree that a single note is unprotectable.²³⁵ To hold otherwise would be impractical because even an expert musicologist would be hard-pressed to identify the source of a single note.²³⁶ Additionally, as the sizes of the disputed samples in the case law approach the smallest uncopyrightable musical unit—a single note—other characteristics such as sample length,²³⁷ frequency of occurrences,²³⁸ digital manipulation,²³⁹ melody,²⁴⁰ harmony,²⁴¹ and chord progression,²⁴² among others,²⁴³ necessitate more complicated analyses by courts.

In light of these characteristics, analogizing sampling to visual art, for example, is “imperfect”²⁴⁴ to the extent that a dot on a canvas is perceptible without limitation, whereas a sample is only perceptible for a

229. *See infra* Section III.A.1.

230. *See supra* Section II.B.1.

231. *Swirsky v. Carey*, 376 F.3d 841, 848 (9th Cir. 2004).

232. *See Skidmore v. Zeppelin*, 952 F.3d 1051, 1071 (9th Cir. 2020).

233. *See Gray v. Perry*, No. 2:15-CV-05642, 2020 U.S. Dist. LEXIS 46313, at *20 (C.D. Cal. Mar. 16, 2020).

234. *See Elsmere Music, Inc. v. Nat’l Broad. Co.*, 482 F. Supp. 741, 744 (S.D.N.Y. 1980).

235. *See Swirsky*, 376 F.3d at 851 (“[A] single musical note would be too small a unit to attract copyright protection.”); 4 NIMMER ON COPYRIGHT § 13.03 (2022) (“[I]t could be safely said that a similarity limited to a single note never suffices . . .”).

236. *See supra* notes 197–200 and accompanying text. Although a sample of a single note could come from a sound recording of a song or from a sample library, *see supra* Sections II.A.2, II.C., the sounds of two trumpets playing the same note could be nearly indistinguishable, *cf. Campbell, supra* note 44.

237. *See supra* Section II.C.

238. *See supra* Section II.C.

239. *See supra* notes 187–190 and accompanying text.

240. *See, e.g., Batiste v. Najm*, 28 F. Supp. 3d 595, 623–24 (E.D. La. 2014).

241. *See Swirsky v. Carey*, 376 F.3d 841, 849 (9th Cir. 2004).

242. *See id.*

243. *See id.*

244. Jeremy King, *Tiny, Tiny Copyright: An Examination of the Copyrightability of Sampler Instruments and Its Impact on Derivative Works*, 45 COLUM. J.L. & ARTS 95, 101 (2021).

finite time.²⁴⁵ Consequently, at least one commentator has identified a need for “objective criteria by which a [sample] could be measured in a *de minimis* analysis.”²⁴⁶ The Elemental Test for *de minimis* sampling supplies these criteria.²⁴⁷

1. Recommendation: The Elemental Test for *De Minimis* Sampling of Sound Recordings

The Elemental Test for *de minimis* sampling promotes judicial efficiency,²⁴⁸ while also allowing for *de minimis* sampling, by adding a threshold *de minimis* inquiry before a court engages in a substantial similarity analysis.²⁴⁹ In most cases, no single factor of the Elemental Test will be dispositive because there are conceivably limitless copyrightable musical combinations using the elements of music.²⁵⁰ The six factors comprising the Elemental Test are: (1) whether the sample is arrhythmic;²⁵¹ (2) whether the sample is amelodic;²⁵² (3) the length of the sample;²⁵³ (4) the number of occurrences of the sample within the challenged sound recording;²⁵⁴ (5) whether the sample occurs alone or simultaneously with other sounds;²⁵⁵ and (6) whether the sample was altered before inclusion in the challenged recording.²⁵⁶ Factors (3) through (6) originate from those that courts have used to determine the

245. *But cf. id.* (analogizing sampling to the pointillist movement in visual art).

246. Francesco Di Cosmo, *Return of the De Minimis Exception in Digital Music Sampling: The Ninth Circuit’s Recent Holding in VMG Salsoul Improves Upon the Sixth Circuit’s Holding in Bridgeport, but Raises Questions of its Own*, 95 WASH. U.L. REV. 227, 247 (2017).

247. *See infra* Section III.A.1.

248. *Cf. Bridgeport Music, Inc. v. Dimension Films (Bridgeport II)*, 410 F.3d 792, 799 (6th Cir. 2005) (“The music industry, [and] the courts, [will be] best served [by] something approximating a bright-line test Not necessarily a ‘one size fits all’ test, but one that, at least, [clarifies] what constitutes actionable infringement with regard to the digital sampling of copyrighted sound recordings.”).

249. *See, e.g., VMG Salsoul, L.L.C. v. Ciccone*, 824 F.3d 871, 879–80 (9th Cir. 2016) (engaging in a *de minimis* inquiry instead of a substantial similarity analysis).

250. *Cf. Franciscatti v. Germanotta*, No. 11 CV 5270, 2014 U.S. Dist. LEXIS 81794, at *65 (N.D. Ill. June 17, 2014) (“A ‘unique combination’ of elements otherwise undeserving of protection can form an original expression entitled to copyright protection.”); *Swirsky v. Carey*, 376 F.3d 841, 848 (9th Cir. 2004) (“To pull [the musical] elements out of a song individually, without also looking at them in combination, is to perform an incomplete and distorted musicological analysis.”).

251. *See, e.g., Batiste v. Najm*, 28 F. Supp. 3d 595, 615 (E.D. La. 2014).

252. *See, e.g., id.*

253. *See* 4 NIMMER ON COPYRIGHT § 13.03[A][2][a] (2022).

254. *See supra* Section II.C.

255. *See supra* Section II.C.

256. *See supra* Section II.C.

recognizability of a sample,²⁵⁷ while factors (1) and (2) originate from the musicological elements of melody and rhythm.²⁵⁸

The first two factors of the Elemental Test address the objective musical elements of a single note which render the note an uncopyrightable idea.²⁵⁹ The first factor, whether the sample is arrhythmic, asks whether rhythm is present in the sample.²⁶⁰ A single musical note does not have rhythm because rhythm requires a “series” of musical events.²⁶¹ Even when rhythm is present, courts consistently avoid affording protection to rhythm alone.²⁶² Therefore, because the presence of rhythm in a sample already weighs against infringement, the first factor of the Elemental Test necessarily weighs in favor of *de minimis* sampling when the sample is arrhythmic.²⁶³

The second factor, whether the sample is amelodic, asks whether the sample has a melodic component.²⁶⁴ A single musical note does not possess melody because melody requires “[a] succession of notes, varying in pitch.”²⁶⁵ Thus, as the quantity of successive notes in a sample decreases, the second factor increasingly weighs in favor of *de minimis* sampling.²⁶⁶ A purely amelodic sample will weigh heaviest in favor of *de minimis* sampling.²⁶⁷ However, because “[m]elody is a function of both pitch . . . and rhythm,”²⁶⁸ a sample possessing a succession of pitches also possesses rhythm, but a sample may possess rhythm without also possessing melody.²⁶⁹

257. See *supra* Sections II.B.4., II.C.; *Newton v. Diamond*, 388 F.3d 1189, 1193 (9th Cir. 2003) (“[A] use is *de minimis* only if the average audience would not recognize the appropriation.” (citing *Fisher v. Dees*, 794 F.2d 432, 434 n.2 (9th Cir. 1986))).

258. See *Melody*, THE OXFORD DICTIONARY OF MUSIC (6th ed. 2012); Justin London, *Rhythm*, GROVE MUSIC ONLINE (Jan. 20, 2001), <https://bit.ly/3tcNgeS>.

259. See *supra* note 235 and accompanying text.

260. See, e.g., *Batiste v. Najm*, 28 F. Supp. 3d 595, 615 (E.D. La. 2014).

261. See London, *supra* note 258; see also *Rhythm*, THE OXFORD DICTIONARY OF MUSIC (6th ed. 2012) (defining rhythm as “everything pertaining to the *time* aspect of music, including . . . grouping of notes into beats”).

262. See, e.g., *N. Music Corp. v. King Rec. Distrib. Co.*, 105 F. Supp. 393, 400 (S.D.N.Y. 1952) (“[O]riginality of rhythm is a rarity, if not an impossibility.”); see also *Batiste*, 28 F. Supp. 3d at 616 (citing *N. Music Corp.*, 105 F. Supp. at 400).

263. Cf. *N. Music Corp.*, 105 F. Supp. at 400.

264. See, e.g., *Swirsky v. Carey*, 376 F.3d 841, 849 (9th Cir. 2004).

265. *Melody*, THE OXFORD DICTIONARY OF MUSIC (6th ed. 2012); see Alexander L. Ringer, *Melody*, GROVE MUSIC ONLINE (Jan. 20, 2001), <https://bit.ly/3ncP8jU> (“The smallest melodic-rhythmic unit . . . requires a minimum of two distinct pitch levels.”).

266. Cf. *supra* notes 264–265.

267. Cf. *Swirsky*, 376 F.3d at 851.

268. *Id.* at 846 n.9.

269. For example, a sample could consist of an “unpitched” percussion instrument, such as a temple block. See James Holland, *Temple Blocks*, GROVE MUSIC ONLINE (Jan. 20, 2001), <https://bit.ly/3tgfZ2a>. Although all sounds possess pitch, see generally Charles Taylor & Murray Campbell, *Sound*, GROVE MUSIC ONLINE (Jan. 20, 2001), <https://bit.ly/3zFyTkn> (discussing the properties of sound), a percussion instrument is

In some cases, a sample from a copyrighted sound recording that is both arrhythmic and amelodic will be similar to a sample from a commercial sample library.²⁷⁰ For example, consider the “iconic” kick drum sound from the Roland TR-808 drum machine (“808 kick”).²⁷¹ Because Roland discontinued the TR-808 in 1983,²⁷² a composer wishing to incorporate the 808 kick into a sound recording might either purchase a commercial sample library containing the 808 kick, or create their own sample using a preexisting sound recording.²⁷³ The source of the former option is licensed to encourage incorporating the samples into new recordings,²⁷⁴ but is likely expensive.²⁷⁵ The source of the latter option, although protected by copyright, is more readily accessible.²⁷⁶ The uncopyrightable nature of a single 808 kick, however, remains unchanged.²⁷⁷ Accordingly, under the Elemental Test, the first two factors weigh heavily in favor of the sampling of a single 808 kick qualifying as *de minimis*.

In other cases, the sampling involved will not be purely arrhythmic, purely amelodic, or both.²⁷⁸ Thus, the remaining factors of the Elemental Test are an aggregation of factors courts have used when engaging in ordinary or lay listener analyses to determine the recognizability of the sample.²⁷⁹ The third factor, the length of the sample, concerns the challenged sample’s “quantitative relation” to the original sound recording.²⁸⁰ This factor recognizes that an ordinary listener is less likely to recognize a sample when the sample is only a short portion of the original recording.²⁸¹ This factor will therefore weigh heavier in favor of *de minimis* sampling as the length of the sample dwindles.²⁸²

said to be unpitched when it is not tuned to a “definite pitch.” James Holland & Janet K. Page, *Percussion*, GROVE MUSIC ONLINE (Jan. 20, 2001), <https://bit.ly/3GbD9ur>.

270. See *supra* Section II.A.2.

271. *What Is the 808 Kick, and Why Do We All Still Love It?*, MUSIC RADAR (Aug. 8, 2019) [hereinafter *What Is the 808?*], <https://bit.ly/3f8vcKo>.

272. See Zainab Hasnain, *How the Roland TR-808 Revolutionized Music*, THE VERGE (Apr. 3, 2017), <https://bit.ly/3t94QA7>.

273. See *What Is the 808?*, *supra* note 271 (“Sampling the 808 kick became a common approach very early in the 1980s, with producers realising the potential to tune, filter and process the sound You can buy sample packs of perfectly tuned 808 kicks, make your own or use a software emulation instead.”).

274. See *supra* Section II.A.2.

275. See *supra* Section II.A.2.

276. See *supra* Section II.B.2; cf. *supra* note 91 and accompanying text.

277. See *supra* note 235.

278. See, e.g., *Newton v. Diamond*, 388 F.3d 1189, 1190 (9th Cir. 2003) (involving a three-note sample).

279. See sources cited *supra* note 257.

280. 4 NIMMER ON COPYRIGHT § 13.03[A][2][a] (2022).

281. See *VMG Salsoul, L.L.C. v. Ciccone*, 824 F.3d 871, 879 (9th Cir. 2016); *Steward v. West*, No. CV 13-02449, 2014 U.S. Dist. LEXIS 186012, at *28 (C.D. Cal. Aug. 14, 2014) (citing *Newton*, 388 F.3d at 1193) (“[T]he fact that Defendants’ songs

The fourth factor is the number of occurrences of the sample in the challenged sound recording in relation to the original sound recording.²⁸³ While a bright-line rule delineating how many occurrences of a sample constitutes more than *de minimis* infringement is unattainable,²⁸⁴ this factor recognizes that fewer occurrences of a sample in the challenged recording will weigh in favor of *de minimis* sampling.²⁸⁵ As an example, consider the repetition of a sample of Avril Lavigne's voice in Rihanna's hit song "Cheers (Drink to That)" ("Cheers").²⁸⁶ The first "yay-yeah" sung by Lavigne is three notes, and is less than one second long, but occurs 36 times in "Cheers."²⁸⁷ Is this sampling *de minimis*? Perhaps Rihanna credited Avril Lavigne as a songwriter on "Cheers" anticipating that a court would find that the frequency of the Lavigne sample in "Cheers" makes the sampling more than *de minimis*.²⁸⁸

The fifth factor is whether the sample occurs alone or simultaneously with other sounds.²⁸⁹ In *Ciccone*, the court found it "hard to imagine" that an ordinary listener would recognize Madonna's appropriation of the plaintiff's horn hit because it occurred simultaneously with many other instruments.²⁹⁰ Therefore, because a sample is less recognizable when incorporated alongside other instruments,²⁹¹ this factor weighs in favor of *de minimis* sampling when the sample simultaneously occurs with other sounds.²⁹²

sample only short portions [of the Plaintiffs' recording] . . . greatly increases the chance that 'the average audience would not recognize the appropriation.'").

282. Cf. *Steward*, 2014 U.S. Dist. LEXIS 186012, at *28.

283. See *supra* Section II.C.; *Bridgeport Music, Inc. v. Dimension Films (Bridgeport I)*, 230 F. Supp. 2d 830, 841 (M.D. Tenn. 2002).

284. See 4 NIMMER ON COPYRIGHT § 13.03[A][2][a] (2021) ("No easy rule of thumb can be stated as to the quantum of fragmented literal similarity permitted without crossing the line of substantial similarity.")

285. Compare *Newton v. Diamond*, 388 F.3d 1189, 1192 (9th Cir. 2003) (holding that sample appearing "over forty times" was *de minimis*), with *Ciccone*, 824 F.3d at 879 ("[T]he horn hits appear only five or six times in *Vogue*, rather than the dozens of times that the sampled material in *Newton* occurred in the challenged song in that case.").

286. See RIHANNA, *Cheers (Drink to That)*, on LOUD (Def Jam Records 2010); *Rihanna's 'Cheers (Drink to That)' Sample of Avril Lavigne's 'I'm With You'*, WHOSAMPLED, <https://bit.ly/3q8KNjj> (last visited Jan. 9, 2022).

287. See RIHANNA, *supra* note 286.

288. See *Cheers (Drink to That) – Rihanna*, ALLMUSIC, <https://bit.ly/3F7jomd> (last visited Jan. 9, 2022); see also Jon Caramanica, *It's Got a Great Beat, And You Can File a Lawsuit to It*, N.Y. TIMES (Jan. 6, 2020), <https://nyti.ms/33JINFU> ("[T]he potential for the perception of theft [can be enough] to instigate an arrangement [between songwriters].").

289. See *supra* Section II.C.

290. *Ciccone*, 824 F.3d at 880; see *supra* Section II.C. Even the plaintiff's musicologist had to listen to the horn hit isolated from the other instruments to accurately identify the defendant's sample. See *supra* Section II.C.

291. Cf. *Williams v. Gaye*, 895 F.3d 1106, 1144 (9th Cir. 2018) (isolating challenged samples from their harmonic context before finding them unoriginal); *Newton*

The sixth factor is whether the defendant altered the appropriated sample.²⁹³ In *Ciccone*, the court considered the numerous alterations to the challenged sample before holding that the sample was *de minimis*.²⁹⁴ Indeed, there are many ways to alter a sample.²⁹⁵ One attorney advises that a composer using an uncleared sample “mak[e] it unrecognizable” or “bury[] it in the mix” to reduce the risk of litigation.²⁹⁶ Because an altered sample will not be identical to the corresponding portion of the original recording,²⁹⁷ the altered sample could be said to possess distinguishable variation.²⁹⁸ Therefore, when a sample has been altered, and when the alterations serve to make the sample unrecognizable, the sixth factor will weigh in favor of *de minimis* sampling.²⁹⁹

2. Applying the Elemental Test to the *Ciccone* Horn Hit

When Madonna’s producer appropriated the single horn hit from “Love Break,” he created a small sample library consisting of a single unit: the sample at issue.³⁰⁰ Instead of programming the sample into a performance instrument or a MIDI-capable device,³⁰¹ Pettibone copied the sample of the single horn hit to make the new single and double horn hits in “Vogue.”³⁰² Applying the six-factor Elemental Test³⁰³ to Pettibone’s sampling supports a finding of *de minimis* sampling in the *Ciccone* case in agreement with the Ninth Circuit’s holding.³⁰⁴

The first factor of the Elemental Test weighs in favor of *de minimis* sampling because the *Ciccone* horn hit consists not of a series of musical events³⁰⁵ but rather a single stab of horns.³⁰⁶ Therefore, the horn hit is arrhythmic and weighs in favor of *de minimis* sampling.³⁰⁷

v. Diamond, 204 F. Supp. 2d 1244, 1258 (C.D. Cal. 2002) (noting that only a person listening to plaintiff’s sound recording could recognize a sample of it in the defendant’s song).

292. See *supra* notes 290–291 and accompanying text.

293. See *supra* Section II.C.

294. See *supra* Section II.C.

295. See *7 Ways to Make a Sample Completely Your Own*, REVERBNATION, <https://bit.ly/3t8FTVC> (last visited Jan. 8, 2021); see generally Zakaria Kiadi, *Every Audio Effect Explained*, EMASTERED (June 14, 2021) <https://bit.ly/3t6pZLs>.

296. Richard Stim, *When You Need Permission to Sample Others’ Music*, NOLO, <https://bit.ly/3r1hXAS> (last visited Jan. 8, 2021).

297. See *Newton v. Diamond*, 388 F.3d 1189, 1195 (9th Cir. 2003).

298. See *supra* note 106 and accompanying text.

299. See *supra* notes 187–190 and accompanying text.

300. See *supra* Sections II.A.2., II.C.

301. See *supra* Section II.A.2.

302. See *supra* Section II.C.

303. See *supra* Section III.A.1.

304. See *supra* Section II.C.

305. See *supra* note 261 and accompanying text.

306. See case cited *supra* note 6.

307. See *supra* Section III.A.1.

The second factor of the Elemental Test necessarily weighs in favor of *de minimis* sampling because the *Ciccone* horn hit is amelodic.³⁰⁸ Although Pettibone created a double horn hit in “Vogue” similar to the double horn hit in “Love Break,” the double horn hit in “Vogue” consists of separate triggers of a single sample as opposed to a sample of horns playing the hits in succession.³⁰⁹ Because the sample does not embody a succession of notes, it is amelodic.³¹⁰ Therefore, the second factor weighs in favor of *de minimis* sampling.³¹¹

Next, because the *Ciccone* horn hit is less than one second long,³¹² like the piano snippets used in the very first digital samples in the 1970s,³¹³ the third factor weighs in favor of *de minimis* sampling. The *Ciccone* court, therefore, correctly determined that the sampled horn hit was *de minimis* in part due to its length.³¹⁴ As to the fourth factor, the horn hit occurs significantly less times in “Vogue” than it does in “Love Break.”³¹⁵ Accordingly, the *Ciccone* court determined that the number of occurrences of the horn hit rendered it *de minimis*.³¹⁶ The fifth factor weighs in favor of *de minimis* sampling because the horn hit occurs simultaneously with other sounds in “Vogue.”³¹⁷

Lastly, the sixth factor weighs in favor of *de minimis* sampling because Pettibone applied several digital manipulations to the horn hit.³¹⁸ In so doing, he created his desired artistic effect without incurring the extra time and expense of using a virtual instrument or a sample library of brass samples.³¹⁹ By transposing the horn hit, truncating it, and

308. See *supra* Section III.A.1. For a transcription of the horn hits in both “Love Break” and “Vogue,” see VMG Salsoul, L.L.C. v. Ciccone, 824 F.3d 871, 876 (9th Cir. 2016).

309. See *supra* note 199 and accompanying text. Pettibone likely achieved this effect by using a sequencer program. See sources cited *supra* note 74.

310. See *supra* Section III.A.1. Although the *Ciccone* sample embodies a chord, see *Chord*, THE OXFORD DICTIONARY OF MUSIC (6th ed. 2012) (defining a chord as a “simultaneous combination of notes”), the author notes here that a chord is not a copyrightable element, see *Swirsky v. Carey*, 376 F.3d 841, 851 (9th Cir. 2004); *Batiste v. Najm*, 28 F. Supp. 3d 595, 615–16 (E.D. La. 2014).

311. See *supra* Section III.A.1. Analysis of the first two factors here renders the *Ciccone* horn hit more akin to a sample of the 808 kick, see *supra* Section III.A.1, than, for example, a sample of a three-note flute sequence, see *Newton v. Diamond*, 388 F.3d 1189, 1195–96 (9th Cir. 2003).

312. See *supra* note 190 and accompanying text.

313. See *supra* Section II.A.1.

314. See *supra* Section II.C.

315. See *supra* Section II.C.

316. See *supra* Section II.C.

317. See *supra* Section II.C.

318. See *supra* Section II.C.

319. See *supra* Section II.A.2. If Pettibone wanted to take the extra time and expense to create a professional-sounding single horn hit, he could have used, among other resources, Native Instruments’ “Symphony Series – Brass” sound library, which costs \$499, requires 49 gigabytes of space, and contains over 25,000 samples of brass

embedding it among other sounds and effects,³²⁰ Pettibone added distinguishable variation to the sample that the *Ciccone* court ultimately held rendered the horn hit unrecognizable.³²¹ Therefore, because Pettibone digitally manipulated the horn hit, the sixth factor weighs in favor of *de minimis* sampling.³²²

In sum, because all six factors of the Elemental Test as applied to the *Ciccone* horn hit weigh in favor of *de minimis* sampling, the Ninth Circuit correctly held that Pettibone's sampling of the horn hit was *de minimis*.³²³ However, not all cases will result in a finding of *de minimis* sampling under the Elemental Test.³²⁴ In those cases, courts should use the Ninth Circuit's extrinsic/intrinsic test for substantial similarity.³²⁵

B. Courts Should Use the Ninth Circuit Approach to Substantial Similarity Analysis

When sampling is more than *de minimis*, courts should use the Ninth Circuit's approach to substantial similarity analysis because it incorporates both objective and subjective components.³²⁶ Both the Second and Eleventh Circuits use a subjective ordinary listener standard for determining substantial similarity.³²⁷ However, because an array of manipulations can be applied to a sample which render the sample unrecognizable,³²⁸ the ordinary listener may miss a material element of the sample that a musicologist might uncover.³²⁹ Further, when a court relies only on an ordinary listener standard, it substitutes its judgment for that of a musicologist even though courts are "not equipped to issue expert opinions on music."³³⁰ Accordingly, substantial similarity analysis should include an extrinsic component, as established in the Ninth

instruments, together and individually, using over 100 articulations and playing styles. See *Symphony Series – Brass*, NATIVE INSTRUMENTS, <https://bit.ly/3n7hU59> (last visited Jan. 9, 2022).

320. See *supra* Section II.C.

321. See *supra* Sections II.B.1., II.C, III.A.1.

322. See *supra* Section II.C.

323. See *supra* Sections III.A.1, II.C.

324. Because the *de minimis* principle is an exception to copyright infringement, a court could conclude, after weighing the factors of the Elemental Test, that an instance of sampling was substantial rather than *de minimis*. Cf. *supra* notes 213–214 and accompanying text.

325. See *infra* Section III.B.

326. See *supra* Section II.B.4.

327. See *supra* Section II.B.4.

328. See *supra* Section II.C.

329. See *supra* Section II.B.4. But see *supra* note 165 and accompanying text.

330. VMG Salsoul, L.L.C. v. Ciccone, No. CV 12-05967, 2013 U.S. Dist. LEXIS 184127, at *35 (C.D. Cal. Nov. 18, 2013).

Circuit, to allow parties to introduce expert testimony from musicologists.³³¹

By incorporating expert testimony from musicologists into its analysis, a court could assess comprehensive information about a sample against objective criteria.³³² The court could then achieve, *inter alia*, the analysis sought by the Sixth Circuit's filter approach without submitting filtered recordings to the jury.³³³ The subjective perspective of the jury would be informed by the intrinsic component of the substantial similarity test.³³⁴

The intrinsic test essentially incorporates the ordinary listener standards of the Second and Eleventh Circuits.³³⁵ Rather than casting aside the subjective component, as the Sixth Circuit did with *Bridgeport*'s bright-line rule, the Ninth Circuit's approach embraces the subjective ordinary listener's response.³³⁶ The intrinsic test further allows for case resolution in part by actual ordinary listeners—a jury—when a court finds that reasonable minds could differ as to whether two recordings are substantially similar.³³⁷ If a court unilaterally decides a sampling case by listening to the sound recordings after engaging in extrinsic analysis, then its judgment will not reflect the perspective of the ordinary listener because an ordinary listener does not analyze recordings with expert assistance.³³⁸ By reserving the determination of the ordinary listener's perspective to the jury, the Ninth Circuit's intrinsic test effectively subsumes the Second, Eleventh, and Sixth Circuits' objectives into a more comprehensive framework.³³⁹ Therefore, because the Ninth Circuit's extrinsic/intrinsic test incorporates both the objective analysis of musicologists,³⁴⁰ and the subjective perspective of the ordinary listener,³⁴¹ courts should adopt the Ninth Circuit's approach to substantial similarity analysis.³⁴²

331. See *supra* Section II.B.4.

332. See *Batiste v. Najm*, 28 F. Supp. 3d 595, 602 (E.D. La. 2014).

333. See *supra* Section II.B.4.

334. See *supra* Section II.B.4.

335. See *supra* Section II.B.4.

336. See *supra* Section II.C.

337. See *Gray v. Perry*, No. 2:15-CV-05642, 2020 U.S. Dist. LEXIS 46313, at *40–41 (C.D. Cal. Mar. 16, 2020).

338. See *supra* Section II.B.4.

339. See *supra* Sections II.B.4, II.C.

340. See *supra* Section II.B.4.

341. See *supra* Section II.B.4.

342. See *supra* Section II.B.4.

IV. CONCLUSION

As sampling continues to grow, so too will music copyright infringement litigation.³⁴³ Because copyrights protect expressions and not ideas,³⁴⁴ courts struggle to articulate when two sound recordings are so substantially similar that one infringes the copyright of the other.³⁴⁵ The resulting case law diverges not only on the issue of whether *de minimis* sampling should be allowed, but also on how to analyze substantial similarity when the sampling is more than *de minimis*.³⁴⁶ Because courts agree that a single musical note is uncopyrightable, some samples will be small enough to be uncopyrightable or *de minimis*.³⁴⁷ By incorporating the musicological elements of melody and rhythm, the Elemental Test adds clarity to the *de minimis* analysis, appeases the Sixth Circuit's concern for judicial efficiency, and affirms that the Ninth Circuit correctly decided the *Ciccone* case.³⁴⁸ Further, the Ninth Circuit's extrinsic/intrinsic approach to substantial similarity analysis enables consideration of both the objective perspective of the musicologist and the subjective perspective of the ordinary listener.³⁴⁹ By adopting the Elemental Test in conjunction with the Ninth Circuit's extrinsic/intrinsic approach to substantial similarity analysis, courts will be well-equipped for sound recording copyright infringement cases with analytical tools informed by the experts on music: musicians.³⁵⁰

343. See *supra* Part I; *supra* Section II.A.

344. See *supra* Section II.B.1.

345. See *supra* Section II.B.4.

346. See *supra* Sections II.B.4, II.C.

347. See *supra* Section III.A.

348. See *supra* Section III.A.

349. See *supra* Section III.B.

350. See *supra* Sections III.A, III.B.