FIX IT IN THE MIX: DISAGGREGATING THE RECORD PRODUCER’S COPYRIGHT†

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I. INTRODUCTION


— BRIAN ENO

“MODERN MUSIC OWES A GREAT DEBT TO THE BEHIND-THE-STUDIO-GLASS ‘MAGICIANS’ WHO DISCOVERED THAT AS LONG AS A ‘SOUNDSCAPE’ COULD BE IMAGINED, WITH A FEW ‘TRICKS’ AND ‘SLEIGHTS’ IT COULD PROBABLY BE BROUGHT INTO YOUR HOME, YOUR CAR OR YOUR LOCAL FAST FOOD RESTAURANT.”

— ALAN PARSONS

“We’ll fix it in the mix” has long been a regrettably common refrain during recording sessions. If the singer is flat or the guitar is wimpy or the toms ring too much — “don’t worry, we’ll fix it in the mix.” The phrase facilitates progress, preventing the session from getting mired in (apparently) minor details that can (hopefully) be remedied later on. This philosophy aptly describes Congress’s approach to the copyright interests that record producers may enjoy in the sound recordings they produce, which I will refer to as the “producer’s copyright.”

Even before passing the Copyright Act of 1976 (“1976 Act”), its framers expected that there would “usually” be a producer’s copyright. Since the 1976 Act’s passage, such copyrights have rarely been litigated and, when they have, courts have not been required to closely

2. Id. at 16.
3. See, e.g., We’ll Fix It In the Mix — Overcoming Bad Production/Engineering Habits in the Era of Unlimited Tracks, Artist House Music (Oct. 2007), http://www.artistshousemusic.org/videos/well+fix+it+in+the+mix+overcoming+bad+production+engineering+habits+in+the+era+of+unlimited+tracks.
4. See generally Joe Gilder, The “Fix It in the Mix” Mentality, HOME STUDIO CORNER (May 17, 2010) (“However, we must be careful not to sacrifice audio quality for the sake of productivity. . . . Don’t sacrifice the music on an altar of efficiency or fancy toys.”), http://www.homestudiocorner.com/fix-it-in-the-mix.
6. See, e.g., H.R. REP. NO. 94-1476, at 56 (1976) (“The copyrightable elements in a sound recording will usually, though not always, involve ‘authorship’ both on the part of the performers . . . and on the part of the record producer responsible for setting up the recording session, capturing and electronically processing the sounds, and compiling and editing them to make the final sound recording.”); Dorothy Pennington Keziah, Head of the Music Section, Examining Div., U.S. Copyright Office, Address at the ALI-ABA Symposium on Law and the Publishing and Entertainment Media: Operation of the Sound Recording Statute (Oct. 20, 1973), in 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 2.10 n.42 (2012) [hereinafter NIMMER 1].
analyze the sufficiency of a producer’s contribution under general joint authorship principles. Consequently, the ill-defined producer’s copyright has not been problematic. However, the producer’s copyright could figure prominently in copyright termination disputes starting in 2013, at which time courts will likely be compelled to scrutinize the producer’s role more carefully.

Courts confronted with the producer’s copyright will immediately encounter at least three definitional issues. First, the producer’s role is highly elastic. The House Report of the 1976 Act noted that, in some instances, a producer’s contribution could be: (1) so significant that the producer is the sole author, (2) sufficient to share joint authorship with the artist, or (3) so minimal that the producer enjoys no interest whatsoever. Producers, therefore, cannot be treated as joint authors per se. Thus, it is necessary to craft a two-part inquiry that first isolates the producer’s contributions and then determines whether those contributions are sufficient under joint authorship principles.

Second, defining the ways a producer can contribute to a sound recording requires a more accurate understanding of the record-making process than authorities have demonstrated. For example, citing a Copyright Office official, Professor Melville Nimmer suggests that the following may sustain a producer’s copyright: (1) quadraphonic panning, (2) equalizing, (3) changing the highs and lows, (4) providing more bass and treble, (5) adding echo, and (6) abridging by making discretionary and non-obvious internal cuts. There are at least two problems with this list. First, items (2), (3), and (4) are all the same thing: frequency equalization. Second, and more im-

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7. See, e.g., Forward v. Thorogood, 985 F.2d 604, 606–07 (1st Cir. 1993) (affirming district court’s finding that arranging and financing recording session was insufficient for joint authorship where producer “made no musical or artistic contribution”); Diamond v. Gillis, 357 F. Supp. 2d 1003, 1007 (E.D. Mich. 2005) (finding no express repudiation of joint authorship where credits listed plaintiff as co-producer and engineer).

8. See infra Part II.D; see also Sound Recordings as Works Made for Hire: Hearing Before the H. Subcomm. on Courts and Intell. Prop. Comm. on the Judiciary, 106th Cong. 91, 94 (2000) (hereinafter Hearing) (statement of Marybeth Peters, Register of Copyrights), available at www.copyright.gov/docs/regstat52500.html (“There could easily be a dozen or more potential coauthors of a single sound recording” including producers like “Quincy Jones, Phil Spector, and Babyface, whose contribution of authorship to a sound recording can equal or even exceed that of the featured artist.”).

9. See 6 NIMMER § 30.03[B] [hereinafter NIMMER 6] (“[Producer] agreement[s] should clearly set forth the obligations of the producer, since the role of producers in the recording industry can vary widely.”).

10. See H.R. REP. NO. 94-1476, at 56 (1976) (discussing joint authorship, then noting “[t]here may[] be cases where the record producer’s contribution is so minimal that the performance is the only copyrightable element in the work, and there may be cases (for example, recordings of birdcalls, sounds of racing cars, et cetera) where only the record producer’s contribution is copyrightable”).

11. NIMMER 1, supra note 6, § 2.10[a][2][b] (citing Keziah, supra note 6).

importantly, it is generally one of several types of engineers who perform these operations — not the producer.  

This reveals a third definitional problem: the record-making process often involves a host of creative participants, each with colorable co-authorship claims, whose relative contributions must be defined and examined. In effect, recognizing a “producer’s copyright” might also require recognizing several “engineers’ copyrights.” Further complicating matters, the distinctions between the roles of these various creative participants have blurred as the technologies and practice of sound recording have democratized.

This Note crafts a general framework that will help determine the copyright interests in a sound recording. Part II discusses co-authorship in sound recordings. Part III identifies and describes participants in the record-making process. Part IV synthesizes the prior two Parts to outline the general framework. Part V exemplifies the final phase of this framework by analyzing two of the many creative contributions in the record-making process and discussing whether certain creative decisions related thereto should count in favor of finding a copyright interest.

13. Taking issue with the reasoning in the House Report, see H.R. REP. NO. 94-1476 (1976), Nimmer argues that a record producer’s copyright claim based on merely “setting up the recording session” would be “ill-based indeed” and that it “is the sound engineer who actually performs the task of capturing and electronically processing the sounds”; therefore a producer’s copyright “must be derivative, through employment for hire or assignment.” NIMMER 1, supra note 6. However, after recognizing that engineers can acquire a copyright interest in the sound recording and discussing how a producer can acquire that interest, Nimmer ignores the ramifications of the producer failing to so acquire that interest. See id. § 2.10[A][3] (“The resulting ownership of the sound recording copyright will either be exclusively in the performing artists, or (assuming an original contribution by the sound engineers, editors, etc., as employees of the record producer), a joint ownership between the record producer and the performing artists.” (footnotes omitted)). This Note addresses the oversight.

14. See Susan Butler, In the Vault, BILLBOARD, Aug. 12, 2006, at 26, 28–29, available at http://www.copyright.gov/docs/termination/comments/2010/reply/susan-butler-music-confidential.pdf (quoting an unnamed recording industry executive: “Mixing engineers might be considered authors because they are taking those sounds and changing those sounds to create the final product . . . . Is a regular engineer that’s moving dials an author? Maybe.” (internal quotation marks omitted)).

15. See infra Part III.C.

16. DAVID HUBER & ROBERT E. RUNSTEIN, MODERN RECORDING TECHNIQUES 18 (4th ed. 1997) (“As artists, engineers, and others in the industry have become more knowledgeable about the numerous aspects that go into producing a project, [the producer’s] role may be handled by the artist him–herself or collaboratively with the engineer. Conversely, as producers become increasingly knowledgeable about recording technology, it’s becoming more and more common to see them sitting behind the console at the controls.”).
II. JOINT AUTHORSHIP AND THE PRODUCER’S COPYRIGHT

The 1976 Act recognizes three authorship classifications. First, copyright can “vest[] initially in the author or authors of the work.”\(^{17}\) Second, under the “Works Made for Hire” provisions, certain specified circumstances allow an “employer or other person for whom the work was prepared [to be] considered the author” of the work.\(^{18}\) Third, and most importantly for this Note, copyright can vest in all the authors of a “joint work.” Each of the joint authors holds an undivided interest in the whole work and enjoys all rights of authorship.\(^{19}\)

A joint work is “a work prepared by two or more authors with the intention that their contributions be merged into inseparable or interdependent parts of a unitary whole.”\(^{20}\) This definition requires: (1) contributions by each author, (2) intent, and (3) merger of the contributions.\(^{21}\) Merger is not at issue here,\(^{22}\) thus the remainder of this Part focuses on the contribution and intent prongs.

A. Contribution

There are three conceptions of what satisfies the contribution requirement. First, the majority rule, as articulated by Professor Paul Goldstein, requires an independently copyrightable contribution.\(^{23}\) The Second and Ninth Circuits follow this rule,\(^{24}\) making it the most important for the New York- and California-centric entertainment industries.\(^{25}\) Second, the minority rule articulated by Nimmer requires

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18. Id. § 201(b).
19. E.g., Childress v. Taylor, 945 F.2d 500, 505 (2d Cir. 1991).
22. See Sys. XIX, Inc., 30 F. Supp. 2d at 1229 (concluding that the jury could reasonably find “implied agreement to jointly create sound recording” from “interdependent contributions” of performance and recordation).
23. 1 Paul Goldstein, Goldstein on Copyright § 4.2.1.2 (3d ed. 2012). Interestingly, this rule sets a higher bar than § 101 requires. See Childress, 945 F.2d at 506 (“The Act surely does not say that each contribution to a joint work must be copyrightable.”). The policy rationale for exceeding the statutory requirements was, in part, because parties without copyrightable contributions are free to contract for an ownership interest in the work. Id. at 506–07. However, as this Note highlights, contracting for co-ownership is not the same as a vested co-ownership interest ab initio. Namely, the inalienable and nonwaivable termination right limits the ability to contract for ownership in a work over the life of that work. See infra Part II.D.
24. See, e.g., Aalmuhammed v. Lee, 202 F.3d 1227, 1231 (9th Cir. 2000) (“A ‘joint work’ in this circuit ‘requires each author to make an independently copyrightable contribution . . . .’” (citation omitted)); Childress, 945 F.2d at 506–07 (enunciating the independently copyrightable contribution standard).
25. See Donald S. Passman, All You Need to Know About the Music Business 17 (7th ed. 2009) (“The major players [in the music industry] are almost all in Los Angeles and New York . . . .”).
only a more-than-*de minimis* contribution, which may include contributions of uncopyrightable material. 26 Recent cases in the Seventh and Fourth Circuits endorse this rule. 27 Third, William Patry offers a compromise, requiring "some minimal amount of expression." 28 No court has explicitly adopted the Patry Rule.

Both the Patry and Goldstein rules require some degree of "expression," and the threshold for expression is typically regarded as trivial. 29 In *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*, the court noted that "[a] copyist’s bad eyesight or defective musculature, or a shock caused by a clap of thunder, may yield sufficiently distinguishable variations . . . [which] the ‘author’ may adopt . . . as his and copyright it." 30 In *Bleistein v. Donaldson Lithographing Co.*, Justice Holmes posed a similarly trivial hurdle: "Personality always contains something unique. It expresses its singularity even in handwriting, and a very modest grade of art has in it something irreducible, which is one man’s alone. That something he may copyright unless there is a restriction in the words of the act." 31 Holmes’s inclusive standard contemplates that even *involuntary* expressions of personality suffice for copyrightability. 32

Despite the apparently trivial threshold for finding expression, there are several notable limitations to this approach relevant to the purposes of this Note. First, copyright may not extend to any "fact" or "idea." 33 Only expressions thereof can sustain copyright. 34 Second, some creative decisions are unprotectably commonplace because they

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26. NIMMER 1, supra note 6, § 6.07[A][3][a] (suggesting that "sparkling plot ideas" may suffice). Presumably, Nimmer’s careful adjective implies that “generic” plot ideas probably would not rise above the *de minimis* threshold. This would seem to create a spectrum of contributable ideas, inviting qualitative judgments about the merits of a particular idea.


29. See Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 547 (1985) ("[C]opyright is limited to those aspects of the work — termed ‘expression’ — that display the stamp of the author’s originality."); Feist Publ’ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 345–46 (requiring “originality” to sustain a copyright claim, which in turn requires (1) “independent creation” and (2) “a modicum of creativity”). Independent creation is not a concern for this Note.

30. 191 F.2d 99, 105 (2d Cir. 1951).

31. 188 U.S. 239, 250 (1903).

32. See Justin Hughes, *The Photographer’s Copyright — Photograph as Art, Photograph as Database*, 25 HARV. J.L. & TECH. 339, 370 (2012) (describing Holmes’s standard as a “fingerprint or seepage theory of originality: whatever you do, you leave your imprint . . . . [T]he default value is in favor of originality”).

33. 17 U.S.C. § 102(b) (2006); Feist, 499 U.S. at 350 (discussing the “idea/expression or fact/expression dichotomy”).

34. See Feist, 499 U.S. at 349–50 (noting that “copyright assures authors the right to their original expression, but encourages others to build freely upon the ideas and information conveyed by a work”) (citing Harper & Row, 471 U.S. at 556–57)).
are obvious, customary, and expected. Third, the related scènes à faire doctrine excludes from consideration those elements of a work that are dictated by or common within a particular genre. Fourth, expressions that are dictated by external factors may be found insufficiently creative. Fifth, if there are only a few ways to express an idea, then idea and expression are said to have “merged” and copyright cannot extend to the merger.

Recent opinions describing expression in photography provide additional guidance for scrutinizing expression in sound recordings because both media involve technologies that are capable of accurately capturing and reproducing their subjects. In Mannion v. Coors Brewing Co., Judge Kaplan articulated three potential forms of expression in photography. First, “originality in the rendition” involves “such specialties as angle of shot, light and shade, exposure, effects achieved by means of filters, developing techniques etc.”. For sound recordings, angle of shot correlates with microphone placement; light and shade correlate with frequency characteristics achieved when capturing or processing sounds; and effects from filters correlate with various sonic effects applied in the studio. Second, “originality in timing” arises from being “at the right place at the right time.” This consideration best relates to documentarian recordings. Third, “originality in the creation of the subject” or composing the photograph

35. Id. at 363–64 (holding that a comprehensive, alphabetical phonebook listing “utterly lacks originality” as “an age-old practice, firmly rooted in tradition and so commonplace that it has come to be expected as a matter of course”).


37. See Computer Assocs. Int'l, Inc. v. Altai, Inc., 982 F.2d 693, 707 (2d Cir. 1992) (noting that the court must filter from analysis components “required by factors external to” a computer program); see also Feist, 499 U.S. at 363 (noting in dicta that a phonebook may “fail the originality requirement” because the state commission required listings as part of the phone company’s monopoly franchise and “[a]ccordingly, one could plausibly conclude that this selection was dictated by state law,” not by the phone company).

38. See, e.g., Morrissey v. Procter & Gamble Co., 379 F.2d 675, 678–79 (1st Cir. 1967) (“When . . . the topic necessarily requires . . . if not only one form of expression, at best only a limited number . . . it is necessary to say that the subject matter would be appropriated by permitting the copyrighting of its expression.”) (internal quotation marks and citations omitted)).

39. See NIMMER 1, supra note 6, § 2.10[A][2][b] (“The acts of ‘capturing and electronically processing the sounds’ are closely analogous to the acts of a photographer in capturing and photographically processing light images. Just as there may be copyrightable originality in photography, it is arguable that there may also be originality in the recording process.”) (footnotes omitted); cf. Meshwerk, Inc. v. Toyota Motor Sales U.S.A., Inc., 528 F.3d 1258, 1263 (10th Cir. 2008) (using lessons from photography as an analogy for digital wireframe models because “virtual worlds and digital media [also] seek to mimic the ‘real’ world”).


41. Id. at 456 (internal quotation marks and citations omitted).

42. Id. at 452–53 (internal quotation marks and citations omitted).

arises from creating the scene by placing subjects in the captured arrangement. This consideration correlates with crafting the “mix.”

Additionally, in Bridgeman Art Library, Ltd. v. Corel Corp., the court held that “substantially exact” photographs of public domain works contained no element of originality and thus did not qualify for copyright protection. In Meshwerks, Inc. v. Toyota Motor Sales U.S.A., Inc., the Tenth Circuit extended this logic from photographs to digital models of cars. There, Meshwerks digitally reproduced Toyota’s cars using scanning technology, but the automated process could not reproduce certain details like headlights, door handles, wheels, and emblems. Digital artists recreated those details. Notwithstanding any unintentional variations by the digital artists, Meshwerks held the digital models insufficiently expressive because Meshwerks aspired to depict only “raw facts in the world.” Thus, courts testing the Alfred Bell/Bleistein dicta indicate that an aspiration of fidelity to the underlying subject can vitiate a copyright interest. This consideration is especially relevant for sound recordings, where “high-fidelity” has been, and frequently still is, a central aspiration in the record-making process.

Even when expressive contributions are found, some courts suggest that those contributions must still exceed a de minimis threshold, whether in quantity or quality. Serious inquiry into the record-making process would potentially reveal an astounding amount of potentially expressive contributions and courts adhering to this standard would need to examine whether the identified contributions, alone or in combination, exceed the threshold.

45. The “mix” is the sonic manipulation, volume balance, and panoramic placement of each instrument that ultimately creates a “soundstage” for the listener. See infra Parts III.C, V.B.
46. 25 F. Supp. 2d 421, 426–28 (S.D.N.Y. 1998) (holding no copyright exists when seeking “to duplicate exactly the images of the underlying works”); see also Nimmer 1, supra note 6, § 2.08[E][2] (citing Bridgeman to articulate “slavish copying” limitation).
47. 528 F.3d 1258, 1264 (10th Cir. 2008).
48. Id. at 1260.
49. Id. at 1260–61.
50. Id. at 1265 (“Meshwerks’ models depict nothing more than unadorned Toyota vehicles—the car as car.”). Meshwerks relied on the fact that Meshwerks did not provide “backgrounds, lighting, angles, and colors”; rather, it provided only wire frame models that “could be expressively manipulated by others” later. Id. at 1266.
51. See Thomson v. Larson, 147 F.3d 195, 200–01, n.14 (2d Cir. 1998) (noting, in dicta, the district court finding that the putative co-author “made at least some non-de minimis copyrightable contribution” because fewer than nine but more than zero percent of the lines in Rent “originated verbatim” with her (internal quotation marks omitted) (emphasis in the original)); see also Childress, 945 F.2d at 509 (noting in dicta that the putative joint author’s contribution would be insufficient even if she were found to have offered “minor bits of expression”); Nimmer 1, supra note 6, § 6.07[A][1] (“[A] person must add more than a word or line to qualify as a joint author.” (citations omitted)).
B. Intent

Although legislative history discusses the producer’s copyright in terms of contributions alone, inquiry into the parties’ intent is a statutory requirement. Furthermore, the complexity of analyzing hundreds of creative contributions may prompt courts to seek more expedient ways to resolve claims, and ruling based on intent may seem attractive. However, the complex relational dynamics of recording sessions likely make assessing intent equally difficult. Additionally, whereas the sufficiency of a contribution can be decided as a matter of law, intent is generally a fact-intensive inquiry. Thus, intent is unlikely to be dispositive pre-trial unless one party indisputably demonstrates the absence of intent. Nevertheless, this Part explores intent in the context of sound recordings.

Putative co-authors must have intent to be “joint authors,” although they need not understand the legal significance of that proposition. Rather, courts look to objective manifestations of mutual regard as co-authors. A signed agreement between the parties stating such intent is the best evidence. Frequently, such agreements are absent, particularly in industries where the term “author” is a misfit.

52. See supra notes 6, 10.
54. Numerous courts have resolved claims of joint authorship based on the absence of intent alone. See, e.g., Richlin v. Metro-Goldwyn-Mayer Pictures, Inc., 531 F.3d 962, 967–70 (9th Cir. 2008); Aalmuhammed, 202 F.3d at 1232–35; Thomson, 147 F.3d at 206–07; Childress, 945 F.2d at 509.
55. See, e.g., Janky v. Lake Cnty. Convention & Visitor’s Bureau, No. 3:05-CV-217-PRC, 2006 WL 2771019, at *13 (N.D. Ind. Sept. 22, 2006) (affirming no joint authorship where, notwithstanding genuine issue regarding intent, the asserted contribution was not independently copyrightable); Rubloff Inc. v. Donahue, No. 93 C 0457, 1994 WL 161098, at *4 (N.D. Ill. Apr. 11, 1994) (holding that “review[ing] and edit[ing] . . . suggest[ing] changes, format[ting] and revis[ing] the text, and coordinat[ing] the production” were insufficient as a matter of law for joint authorship); Johannsen v. Brown, 797 F. Supp. 835, 842 (D. Or. 1992) (finding that the conception of an idea behind an illustration was insufficient as a matter of law for joint authorship).
56. PATRY, supra note 28, § 5:31 (“Whether the parties entertained an intent to create a joint work is a question of fact . . . .”).
57. See Childress, 945 F.2d at 507–08. Interestingly, Childress recognizes that requiring intent to be co-authors again exceeds what is required by the statutory text. Id. (“The wording of the statutory definition appears to make relevant only the state of mind regarding the unitary nature of the finished work— an intention ‘that their contributions be merged into inseparable or interdependent parts of a unitary whole.’” (citing 17 U.S.C. § 101 (2006))).
58. See Richlin, 531 F.3d at 968 (“A contract evidencing intent to be or not to be co-authors is dispositive.”); Childress, 945 F.2d at 508 (articulating useful tests for intent “in the absence of contractual agreements concerning listed authorship”); Aalmuhammed, 202 F.3d at 1232–36.
59. See Nottage v. Jackson, L.R. 11 Q.B.D. 627, 630–31 (1883) (“Persons who draw Acts of Parliament will sometimes use phrases that nobody else uses . . . . [The U.K. Copyright Act of 1862] says,— ‘The author,’ and so on — ‘of every original painting.’ Who ever, in ordinary life, talks of ‘the author’ of a painting? . . . Then it says ‘the author’ of a drawing . . . . But now we have ‘the author’ of a photograph. I should like to know whether the person who drew this Act of Parliament was clear in his mind as to who can be the au-
In those cases, three factors are enlightening: (1) whether one party exhibits control and superintendence of the work, 60 (2) how the parties are billed and credited, 61 and (3) whether the work’s appeal derives from contributions by both putative co-authors, and their relative contributions to the work’s success cannot be disambiguated easily. 62

Frequently, these factors may be unhelpful when considering sound recordings. First, much will hinge on how the copyright registration states the ownership interests. 63 Second, artist-engineer and artist-producer contracts specifying ownership often do not exist. 64 Third, the engineer actually captures and processes the sounds, but the person supervising and controlling the engineer could be the producer, artist, or no one. 65 Moreover, recording sessions often have fluid relationships in which, at various times, the artist may defer to the producer or the producer to the engineer or any other permutation. 66

In Thomson v. Larson, the Second Circuit also considered, to a “more attenuated degree,” how the parties regarded themselves in written agreements with third parties. 67 Here, an artist’s recording

thor of a photograph.” (emphasis in original); cf. Aalmuhammed, 202 F.3d at 1232 (“It is relatively easy to apply the word ‘author’ to a novel. It is also easy to apply the word to two people who work together in a fairly traditional pen-ink way, like, perhaps, Gilbert and Sullivan.”).

60. Richlin, 531 F.3d at 968 (“Control will often be the most important factor.”); Aalmuhammed, 202 F.3d at 1234 (discussing superintendence).

61. Aalmuhammed, 202 F.3d at 1234 (offering, for example, credit to both Gilbert and Sullivan in The Pirates of Penzance).

62. See id. (when “audience appeal of the work turns on both contributions and the share of each in its success cannot be appraised,” intent is likely (internal quotation marks omitted)); see also Edward B. Marks Music Corp. v. Jerry Vogel Music Co., 140 F.2d 266, 267 (2d Cir. 1944) (Hand, J.) (“The popularity of a song turns upon both the words and the music . . . ”).


64. See, e.g., Staggers v. Real Authentic Sound, 77 F. Supp. 2d 57, 65 (D.C.D.C. 1999) (finding that the contract between producer and composer/performer specified only the rights to the musical composition, not the sound recording); Sys. XIX, Inc. v. Parker, 30 F. Supp. 2d 1225, 1226 (N.D. Cal. 1998) (noting that negotiations between artist and recording studio were reduced to writing but never signed). Indeed, significant jurisprudence on the intent prong focuses on what to do in the absence of such a contract. See, e.g., Aalmuhammed, 202 F.3d at 1230; Thomson, 147 F.3d at 196. If there is a producer or engineer agreement, it may purport to make their contributions a work made for hire. See NIMMER 6 § 30.03B(1) (providing a form producer agreement specifying that the producer’s contribution is a work made for hire and, if held ineffectual, an irrevocable transfer). If such explicit terms appear, it might weigh against finding the requisite intent.

65. See Butler, supra note 14, at 29 (quoting producer and engineer Elliot Scheiner: “A lot of times artists don’t even show up for mixes. You’ll do a mix and send it to them. Who was directing me? Not really anybody. I thought about what I would do and what they might want.”); see also Bullyeye with Jesse Thorn: Redd Kross and Matt Braunger, MAXIMUMFUN.ORG (Aug. 6, 2012), http://itunes.apple.com/podcast/id73331298 (discussing tensions in recording studio between artist, engineer, and producer over sonic decisions).

66. See infra Part III.

67. 147 F.3d 195, 204 (2d Cir. 1998).
contract, if there is one, is likely the most useful third party agreement. Even where there is a contract, however, there is no guarantee that it alludes to other parties’ rights or does so with clarity, particularly when the artist’s counterparty is a smaller, inexperienced, or perhaps shady enterprise.  

Two of the above factors cut in favor of finding joint authorship. First, each creative participant is generally credited according to her role. One court has held that engineering and co-producing credits do not constitute “express repudiation” of co-authorship — which would trigger copyright’s statute of limitations — because those roles are “within the ambit of authorship for purposes of a copyright in a sound recording.” Second, the appeal and success of a sound recording is almost certainly attributable to the combination of the artist’s performance and the recorded sonic embodiment of that performance. That sonic embodiment is created through some combination of the efforts of the artist, engineers, and producer. Thus, it will indeed be difficult to tease apart each party’s contribution to the overall audience appeal and success.

C. Authorization

Under the 1976 Act, a work can be fixed “by or under the authority of the author . . . .” Thus, one might be tempted to dismiss difficult joint authorship questions by arguing that producers and engineers, as authorized agents, merely “fix” the artist’s expression. However, when fixing the expression of the dictating author, the agent must merely engage in rote or mechanical transcription without imparting intellectual modification or enhancement. As this Note

68. See PASSMAN, supra note 25, at 135 (“[B]ecause these aren’t mainstream deals, there’s basically no rules”); cf. Moses Avalon, Confessions of a Record Producer 185–86 (2d ed. 2002) (describing various “nasty” contract problems arising from certain “online independent labels”).


70. See Diamond, 357 F. Supp. 2d at 1007; cf. Aalmuhammed, 202 F.3d at 1233 (noting for movies that authorship could potentially be anyone “at the top of the screen credits, sometimes the producer, sometimes the director, possibly the star, or the screenwriter” if they exhibit “artistic control”).

71. Cf. Fleet, supra note 21, at 1237–38 (“In popular music, sound manipulation is often as important as melody for establishing the originality of a composition.”).

72. See infra Parts III, V.

73. Cf. Richtin, 531 F.3d at 970 (noting this factor favored plaintiffs because contributions to audience appeal and success in the production of film could not be apportioned between the treatment writer, screenwriter, actor, composer, and director, among others).


75. Similarly, one might argue that the engineer merely fixes the producer’s expression.

76. Medforms, Inc. v. Healthcare Mgmt. Solutions, Inc., 290 F.3d 98, 107 (2d Cir. 2002) (“[W]hen one authorizes embodiment [by another], that process must be rote or mechanical transcription that does not require intellectual modification or highly technical enhancement.” (citing Andrien v. S. Ocean Cnty. Chamber of Commerce, 927 F.2d 132, 135 (3d
demonstrates, the modern record-making process requires that engineers and producers do more than merely transcribe, at least through technical enhancement if not intellectual modification. Thus, it is unlikely that an authorized agent argument would succeed.

D. Terminations

In 1961, the Register of Copyrights reported that “authors are often in a relatively poor bargaining position” and recommended that Congress “permit them to renegotiate [] transfers that do not give them a reasonable share of the economic returns from their works.”

Congress adopted this recommendation in Section 203 of the 1976 Act. The termination right was intended “to protect authors of expressive works from overreaching by powerful licensees, who may effectively pressure authors to make transfers on unremunerative terms.”

Importantly, the termination right is both non-waivable and inalienable. Transfers or licenses of a copyright made by an author in or after 1978 may be terminated after thirty-five years, meaning that the first round of terminations will become effective in 2013.

However, these termination provisions do not apply to works made for hire. There are only two ways a work can be made for hire: (1) if the work was prepared by an employee within the scope of employment; or (2) if the work was specially ordered or commissioned.

Cir. 1991)); see also Easter Seal Soc’y for Crippled Children & Adults of La., Inc. v. Playboy Enters., 815 F.2d 323, 337 (5th Cir. 1987) (rejecting “out-of-hand” contention that public television station provided only “mechanical fixation” of staged parade because “it worked cooperatively and dynamically with the performers to create the [footage]”), reh’g denied, 815 F.2d 323 (5th Cir. 1987), cert. denied, 485 U.S. 981 (1988); H.R. REP. NO. 94-1476, at 52 (1976) (“When a football game is being covered by four television cameras, with a director guiding the activities of the four cameramen and choosing which of their electronic images are sent out to the public and in what order, there is little doubt that what the cameramen and the director are doing constitutes ‘authorship.’”).

77. See infra Parts III.B–C, IV; see also HUBER & RUNSTEIN, supra note 16, at 18 (describing engineers as “interpreter[s] in a techno-artistic field” tasked with “express[ing] the artist’s music and the producer’s concepts through the medium of recording”).


79. Id. at 360.


81. Id. § 203(a).

82. Id. Other than the explicit statutory provision, another argument is that in a work made for hire scenario, the copyright vests ab initio in the employer for hire rather than the employee for hire and, therefore, the employee for hire never had a copyright interest from which to exercise a termination right. See id. § 201(b).
falls into one of nine enumerated categories, and a written contract specifies that the work was made for hire.83 Artists such as Bob Dylan, Tom Petty, Tom Waits, and Charlie Daniels have already filed termination notices, which has caused great consternation in the music industry.84 Much of the debate has focused on whether sound recordings produced pursuant to a recording contract qualify as works made for hire.85 This Note does not weigh in on the debate, but highlights two lurking issues that will arise if they do not.

First, if a sound recording does not qualify as a work for hire, then the same reasoning that prevents a label from asserting such a claim against artists should also prevent both labels and artists from asserting the same against producers and engineers.86 Second, because authors of joint works can also terminate, the producer’s copyright could have important consequences in termination controversies.

When two or more authors of a joint work execute a single document that grants rights to the work, that grant may be terminated by a majority of the co-authors who executed it.87 However, if a co-author (such as a producer or engineer) transferred her rights in a document separate from her co-authors, then she has a right to terminate her grant independent of the other co-authors.88 The terminating author can exploit the work as she pleases, subject only to an accounting of profits to the other co-authors.89 Many have argued that termination in the joint authorship scenario could produce an economic effect detrimental to the value of the work.90

83. Id. § 101. Those categories are: (1) a contribution to a collective work, (2) part of a motion picture or other audiovisual work, (3) a translation, (4) a supplementary work, (5) a compilation, (6) an instructional text, (7) a test, (8) answer material for a test, or (9) an atlas. Id.


85. See id.; Hearing, supra note 8; Mark H. Jaffe, Defusing the Time Bomb Once Again — Determining Authorship in a Sound Recording, 53 J. COPYRIGHT SOC’Y U.S.A. 601, 613–14 (2006) (“Whether or not a sound recording can constitute a work for hire under the definition of the 1976 Act is one of the most contentious issues between recording artists and record companies . . . .”).


87. 17 U.S.C. § 203(a)(1) (2006); see Hearing, supra note 8 (noting that three members of a five-member band must elect to terminate to be effective).

88. 17 U.S.C. § 203(a)(1) (discussing terminations on a per grant basis); see Hearing, supra note 8.

89. See, e.g., Gaylord v. United States, 595 F.3d 1364, 1376 (Fed. Cir. 2010); Thomson, 147 F.3d at 199; Cnty. for Creative Non-Violence v. Reid, 846 F.2d 1485, 1498 (D.C. Cir. 1988), aff’d, 490 U.S. 730 (1989); see also Hearing, supra note 8.

90. E.g., Hearing, supra note 8 (“[i]f only one of the many potential claimants . . . terminate[s] the assignment of his interest in the copyright, neither the original assignee nor any-
Importantly, termination rights must be exercised within a statutory window and an author’s failure to terminate means that the transfer subsists. Consequently, even in termination disputes between artists and labels, it should still matter whether a producer or engineer qualifies as a joint author. Even if an artist were empowered to terminate, the label would retain any interest acquired from a producer or engineer who qualifies as a co-author but fails to terminate. In such circumstances, the artist cannot win sole ownership, only joint ownership with the label.

III. THE RECORD-MAKING PROCESS AND KEY PLAYERS

“SUDDENLY, I THOUGHT THIS IS THE BEST WAY TO PAINT; PAINTING WITH MUSIC. I WAS NEVER A GREAT PAINTER, BUT WITH TAPE RECORDERS AND STUDIOS, I FOUND THAT I WAS DOING ALL THE THINGS I WANTED TO DO AS A PAINTER . . . BUT BETTER.”

— BRIAN ENO

So far, this Note has discussed artists, producers, and engineers in broad strokes. This Part defines the role of each party in more detail and demonstrates how a deeper understanding of the record-making process can inform joint authorship analysis.

A. Artists

The record-making process traditionally begins with a recording artist who is under contract with a label. Labels provide the artist an advance against future royalties, out of which the artist must secure studio time and hire producers, engineers, and side musicians.

Importantly, not all sound recordings arise from recording contract. Commonly, artists will record at least one demo or album — often in a studio with the help of a producer and/or engineer — before being “discovered” and signed by a label, and sometimes those re-

92. Hearing, supra note 8 (“[A]s long as at least one of the coauthors . . . has not terminated his rights, the record company could, irrespective of the termination of the co-owning artist or producer, continue to exploit the work.”).
93. Brian Eno, supra note 1.
94. The artist could be a single artist or a multi-member band, retain additional musicians, and record original songs or songs written by others. For a thorough treatment of authorship issues arising from these considerations, see generally Fleet, supra note 21.
95. See Hearing, supra note 8 (describing labels’ role generally as “front-end” investor and “back-end” distributor, leaving artists discretion to (1) “hire[ ] or act[] as producers,” (2) retain “back-up singers, musicians and engineers,” and (3) record “in their own studios or at independent studios”).
recordings are subsequently used in the artist’s releases for the label.\textsuperscript{96} Furthermore, today many artists finance their own recordings and distribute over the internet, bypassing labels altogether.\textsuperscript{97} In both of the aforementioned cases, if an artist cannot claim that a musician, producer, or engineer’s work was made for hire, then difficult joint authorship questions arise.

### B. Producers

Apart from the artist, the producer is the only contributor that either Congress or the Register of Copyrights has recognized.\textsuperscript{98} Although a producer can greatly influence a sound recording, the role of “producer” is highly elastic.\textsuperscript{99} Fundamentally, the producer’s job is to help artists navigate the record-making process.\textsuperscript{100} Producers may assist the artist in various capacities including: (1) deciding which songs to record, (2) composing and arranging songs, (3) sifting through numerous takes to find the best ones, and (4) supervising the final mix.\textsuperscript{101} However, their role often varies project-to-project and genre-to-genre.\textsuperscript{102} Producers can have veto power over creative decisions, particularly over first-time artists.\textsuperscript{103} Additionally, some pro-


\textsuperscript{98} See Hearing, supra note 8 (recognizing that engineers exist, but calling only for “[t]he voices of record producers” to be heard in the work-made-for-hire and termination debate); cf H.R. REP. NO. 94-1476, at 56 (1976) (discussing only record producers as potential joint authors).

\textsuperscript{99} See NIMMER 6, supra note 9, § 30.03[B].

\textsuperscript{100} AVALON, supra note 68, at 25 (“The producer guides the artist through the recording of their record.”).

\textsuperscript{101} Id.

\textsuperscript{102} Id. at 26 (“In rock . . . the producer has a more passive role, but in R&B and rap, the dynamics of the producer’s role are more intricate. They usually will write all the music and do all the arranging of the rhythm tracks.”).

\textsuperscript{103} Id.
producers remotely oversee numerous projects at the same time, without ever actually setting foot in the studio. 104

Music-journalist-turned-record-producer Jerry Wexler identified three kinds of producers: (1) the documentarian, (2) the songwriter-musician-engineer, and (3) the “in on a pass” producer. 105 Wexler’s quintessential documentarian was Leonard Chess who would “go into the bar on the north side, [where] Muddy Waters would be playing . . . . He’d bring Muddy into the studio the next day and say ‘Muddy play what you played last night.’ Document what he did.” 106 Wexler’s quintessential songwriter-musician-engineer was Phil Spector, “[w]ho conceived the entire record[,] . . . the record crawled out of his brain like Minerva out of Jupiter’s ear . . . . The record was Phil Spector . . . with a, how should I say, a subordinate group to do his work.” 107 Wexler described himself as an “in on a pass” producer whose contributions consist of providing musical “information” that comes from being a music fan and record collector. 108

From these definitions alone, some authorship issues are evident. Producers of the songwriter-musician-engineer variety likely provide copyrightable contributions, but producers in the other two categories might not. The in-on-a-pass producer who provides “information” might contribute only unprotectable ideas or facts for others to effectuate. 109 The documentarian producer might do nothing more than choose artists to document and, therefore, any producer’s copyright must arise from the documentation process — which may be the province of the engineer rather than the producer. 110 Moreover, if the producer’s purpose is merely to “document,” then Bridgeman and Meshwerks might preclude a copyright interest. 111 A more fundamental problem is the possibility that producers do not maintain the same approach over the course of a recording session. A producer might channel Spector at times and Chess at others, depending on the need or objective of the moment. Consequently, courts would benefit from detailed facts on the producer’s role as it evolves over the entire session.

104. Id. at 28 (“Many producers have somehow mastered the knack of supervising several projects at once without attending a single recording session.”).
106. Id.
107. Id.
108. Id.
109. This contribution might be sufficient under the Nimmer Rule. See supra text accompanying note 26.
110. See infra Part III.C.
111. There is also a question as to whether a producer’s intent to document overrides whatever potentially divergent intent the artist or engineer might have.
C. Engineers

Engineers are heavily involved in many creative decisions. Producers will often seek the opinion of the engineer and “[u]sually, if there is no designated producer on hand, the engineer, by default, will end up in control of the session.” Indeed, “[p]roducers usually get the credit for the engineer’s good work,” and engineers frequently go on to become producers themselves. Thus, the same logic that supports a producer’s copyright will frequently support various engineers’ copyrights depending on the engineers’ contributions and role.

There are generally two engineering philosophies. The earliest engineering philosophy, sometimes called the “craft-union” style, focuses on overcoming technological limits to produce a sound recording as close to the live performance as possible. This philosophy raises Bridgeman and Meshwerks concerns similar to those raised by the practices of documentarian producers.

Technological advances gradually freed engineers from these limitations, allowing them to create and explore new sonic spaces. Starting in the 1960s, engineers began to “slough off their designation as technicians,” establishing themselves as creative collaborators and independent contractors.

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112. See Butler, supra note 14, at 29 (“[R]ecently[,] there have been separate people who work as the recording engineer, overdub engineer and mix engineer. Before then, one engineer worked from the beginning of the recording through the mix.”).
113. See supra note 68, at 22.
114. Id. at 22. Historically, “engineers were employees of the recording studios.” Id. (emphasis in the original). Thus, of all the players in the record-making process, the likeliest candidates to have a work made for hire relationship might be the engineers as employees of the studio. That is to say, if (1) an engineer was found to have a copyright interest and (2) that engineer was working as an employee within the scope of her employment with a studio, then her copyright would have vested in the studio or studio owner. Gradually, however, studios employed engineers less frequently. Today, even house-provided engineers are typically retained on an independent contractor basis. Frequently, established producers “bring their own engineer, whom they are comfortable working with.” Id. Yet this engineer is not an employee of the producer, but rather a frequently used independent contractor.
116. See supra note 14 (“The primary aesthetic question was utilitarian: How well does a recording capture the sounds of a performance?”); id. at 211 (“The good mixer-craftsman would make sure that unwanted sounds were not recorded or were at least minimized, that the desired sounds were recorded without distortion, and that the sounds were in balance. . . . [T]he sound mixer’s work] was to be unobtrusive so as not to destroy the listener’s illusion that he was sitting in Philharmonic Hall rather than in his living room. The art of recording was not to compete for the public’s aesthetic attention to the art that was being recorded.” (emphasis in original)).
117. See supra Part III.B.
118. See supra Part III.B.
119. See BOBBY OWINSKI, THE MIXING ENGINEER’S HANDBOOK 2 (1999) (“O[ver the years recording developed from capturing an unaltered musical event to one that was artificially created through overdubs . . . .”).
“artist-mixers.” Eventually, “recording artists began annexing the craft of sound mixing to their art.” This progression engendered an appreciation for “studio recording as aesthetically desirable in itself rather than as an attempted simulation of a live performance.”

Today, each sound recording typically involves three engineers. First, the tracking engineer captures performances in “multitrack” form by choosing the microphones, their placement in relation to various sound sources, cables, preamplifiers, and any effects in order to achieve the desired sound. Second, the mix engineer takes the multitrack recording and blends each track together by setting relative volume levels and spatial relationships between each track, choosing effects, and ultimately producing a two-track stereo reduction. Third, the mastering engineer takes the stereo reduction and applies additional processing to generate the final product for duplication and distribution.

The relationship between the artist, producer, and the various engineers can change over the course of the record-making process. Producers are more heavily involved in tracking because they can influence the artists’ performances as they are recorded. Mixing and mastering, however, are generally the engineers’ domain. For example, some mastering engineers are sought out and deferred to precisely because of their unique creative contributions. Others are deferred to simply because the mastering process is an enigmatic art. The esoteric and highly technical nature of mastering means that producers and artists may not know precisely what the mastering

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120. Kealy, supra note 116, at 207.
121. Id.
122. Id. at 212.
123. Assistants — second engineers, assistant engineers, maintenance engineers, and tape ops — may also help in a session but are typically support staff. See HUBER & RUNSTEIN, supra note 16, at 18–19. Thus, their creative contributions are likely de minimis.
124. The multitrack format records each instrument — snare drum, bass drum, guitar, and vocals — on its own isolated track.
125. See generally OWSINSKI, supra note 119 (providing a detailed overview of the recording process).
126. See generally id.
128. See AVALON, supra note 68, at 26 (“The producer is like the film’s director and editor. He or she tells the actor how to play the scene and the best way to communicate the message.”).
129. See id. at 24–25 (“Mastering engineers are independent beasts and can master quite comfortably without a producer or artist present . . . . [B]y sympathetically listening to, and working with, the producer, the [mastering] engineer can produce a product that is a good combination of her ideas and the producer’s intentions . . . .”); Butler, supra note 14.
130. See KATZ, supra note 127, at 25 (describing mastering engineers “who had a specific sound — if you went to that engineer, you would send your tape, and get her sound.”).
engineer did, let alone articulate in sufficiently specific terms how the mastering engineer can remedy anything they dislike. In such situations, it would be difficult to attribute the mastering engineer’s contributions to the artist or producer.132

IV. FRAMEWORK FOR INQUIRING INTO THE PRODUCER’S COPYRIGHT

The foregoing Parts identified three primary sets of players in the record-making process and three stages in which there are creative decisions that impact the sound recording. This information provides a structure for an inquiry into the producer’s copyright.

When assessing a producer’s copyright interest in a sound recording, courts should first determine whether the case can be decided early for failure to satisfy the intent requirement. If not, then courts should proceed to examine each party’s sonic contributions. Sound recordings should be divided conceptually into two components: (1) the artist’s recorded performance and (2) the sounds embodying that performance.133 Artists will usually enjoy copyright based on their recorded performance,134 but the producer’s copyright must arise, if at all, from the way the performance is captured and processed.

Courts should then filter out those sounds originating from the artist, leaving only those sounds originating from producers and engineers. Artists always bring some sounds into the recording session. For example, timbral characteristics inherent in a particular singer’s voice cannot be attributed to producers or engineers, but studio techniques that accentuate such characteristics may be. Singers may also have signature vocal effects, such as T-Pain’s over-auto-tuning,135 but

132. Compare PATRY, supra note 28, § 5:18 (“In specialized areas requiring professional or high-level training, . . . it may not be easy to find a joint work where the commissioning party does not have training in the field. The lack of such training renders it less likely that such a party can contribute expression, as opposed to ideas.” (footnotes omitted)), with KATZ, supra note 127, at 25 (“[W]e’ll have discussions . . . of how [producers] perceive their music, and how I think it sounds . . . . Then I’ll send a reference or evaluation CD prior to the final mastering. Usually by that time we are enough in sync so there is no need to produce a second reference . . . .”).

133. Cf. H.R. REP. No. 94-1476, at 56 (1976) (describing possible authorship in sound recordings for “performers whose performance is captured” and record producers “responsible for . . . capturing and electronically processing the sounds, and compiling and editing them to make the final sound recording.”).

134. See Capitol Records, Inc. v. Mercury Records Corp., 221 F.2d 657, 664 (2d Cir. 1955) (Hand, J., dissenting) (“[T]he performer has a wide choice, depending upon his gifts, and this makes his rendition pro tanto quite as original a ‘composition’ as an ‘arrangement’ or ‘adaptation’ of the score itself . . . .”); see also NIMMER 1, supra note 6, § 2.10[A][2][a] (“There is little question but that a performer’s rendition of a work written by another may in itself constitute an original work.”).

producers and engineers could decide to use the same effects.\textsuperscript{136} Thus, it is necessary to identify the source of the sound or effect.

Once the artist’s contributions to the sounds are filtered out, the producer’s and engineers’ contributions should be identified and disentangled. The court can then examine each sonic contribution to determine whether and how the producer or engineers qualify as co-authors.\textsuperscript{137} Importantly, even when engineers fail to qualify, their contributions to the recording should be identified and filtered out when considering ownership as between producer and artist.

V. SONIC CONTRIBUTIONS IN THE RECORD-MAKING PROCESS

This Part illustrates the final stage of the inquiry by examining two of the fundamental contributions in the record-making process: microphone selection and creating the panoramic “soundstage.” In both instances, I provide some preliminary context that will help inform determinations of whether certain decisions related to each contribution should support a finding of joint authorship.

Notably, these examples are only two of the many creative decisions in the record-making process that may give rise to a copyright interest. As previously discussed, Nimmer’s list of seven copyrightable contributions might be reduced to four: (1) panning, (2) editing, (3) equalizing, and (4) adding echo.\textsuperscript{138} However, a more comprehensive list, divided by stage in the record-making process, might look like this:

**Tracking:** (1) physical arrangement of sound sources in the room; (2) microphone selection; (3) microphone placement; (4) preamplifier selection; (5) effects embedded in tracks; and (6) track allocation, such as stereo or multitrack recording of certain sound sources.

**Mixing:** (1) relative volume settings; (2) creating the panoramic soundstage; (3) gain shaping; (4) frequen-

\textsuperscript{136} See Sue Sillitoe & Matt Bell, *Recording Cher’s “Believe,”* SOUNDS & SONGS (Feb. 19, 1999), available at http://www.soundonsound.com/sos/feb99/articles/tracks661.htm (quoting producer Mark Taylor on his experimentation with auto-tuning in Cher’s “Believe,” which was “the first commercial recording to feature the audible side-effects of Antares Auto-tune software used as a deliberate creative effect”: “Basically, it was the destruction of her voice, so I was really nervous about playing it to her! . . . She was fantastic — she just said ‘it sounds great!,’ so the effect stayed. I was amazed by her reaction, and so excited, because I knew it was good.” (internal quotation marks omitted)).

\textsuperscript{137} Courts requiring that expressive contributions exceed a *de minimis* threshold would need to determine whether the identified contributions, alone or in combination, are able to do so. See supra note 51.

\textsuperscript{138} See supra notes 11–12 and accompanying text.
gy equalization; (5) tuning; (6) harmonic shaping; (7) envelope shaping; (8) echo and reverb; (9) distortion and overdrive; (10) phase-shifting; and (11) harmonizing.

**Mastering:** (1) dynamics processing; (2) leveling; (3) harmonic shaping; (4) frequency equalization; (5) echo and reverb; and (6) spatial enhancements.

Of course, each of these decisions must be made for each song on an album and can potentially be made multiple times over the course of a single song.

**A. Microphone Selection**

A microphone transforms acoustic energy from a sound source into an electrical signal that can be recorded and processed. In that way, microphones in sound recordings are similar to cameras and lenses in photography. Just as the camera or lens choice can have bearing on fidelity, depth of field, and boundaries of the image, the microphone choice can impact the fidelity, sonic character, and dimension of the captured sounds. Thus, if a photographer’s selection of camera and lens can be components of originality in the rendition, then so should a producer or engineer’s microphone selection.

Early microphones suffered from technological shortcomings such as high self-noise and poor frequency response, and craft-union engineers were more concerned with mitigating these shortcomings than artistic expression. Today, however, microphone technology has improved to the point where engineers can select a certain microphone for a certain situation because of that microphone’s unique sonic characteristics. Such aesthetic and discretionary choices should give rise to at least as much originality in the rendition as a photographer’s choice of camera and lens.

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139. BARTLETT, supra note 12, at 95.
140. See NIMMER 1, supra note 6, § 210[A][2][b].
142. See supra notes 116–17.
143. Some courts have said that merely selecting a camera or lens is insufficient because it is only the effect of the selection that might be copyrightable. See, e.g., Mannion, 377 F. Supp. 2d at 451. However, as this Part suggests, microphone selection may still give rise to originality due to the sonic effect that each microphone necessarily imparts to a sound recording.
Three characteristics that often guide microphone selection are transducer type, frequency response, and directionality. Microphones with certain types of transducers share some common features. For example, condenser microphones have a “[w]ide, smooth frequency response” with “[d]etailed sound, extended highs,” and the ability to produce “sharp and clear” transient attacks. By contrast, “dynamic” microphones “[t]end[] to have rougher response,” but are “[r]ugged and reliable,” can handle extreme volumes and conditions, and can be used to “take the ‘edge’ off” abrasive sound sources.

While microphones with the same transducer type tend to have the same general characteristics, each microphone has a different range of reproducible frequencies, called the “frequency response,” which can be used to accentuate or diminish certain frequencies. Consequently, microphone selection can contribute to perceptions of the source as, for example, bright or dark, present or distant.

Directionality is the way a microphone responds to sounds coming from different angles. Directional characteristics can be used to vary the capture of room acoustics, background noise, and leakage from other sound sources. Thus, directionality determines the dimensions of the sound that is captured, similar to the way wide-angle, zoom, or telephoto lenses determine the dimensions of a photograph.

With these considerations in mind, courts looking at microphone selection should first consider who chose the microphone and why. For example, if an engineer only has a limited selection of microphones or if a very loud sound source requires a microphone with a high maximum sound pressure level (“SPL”), and self-noise. Bartlett, supra note 12, at 104–05. These characteristics generally influence functionality and fidelity, which are unlikely to be held creative choices. For example, maximum SPL might be an important consideration when recording loud instruments; however, the external factor of the instrument’s loudness dictates the choice of a microphone with a higher maximum SPL. Nevertheless, these considerations also can have important creative ramifications. For example, sensitivity can determine how much detail is captured from a sound source. Similarly, engineers and producers may choose noisy microphones for various reasons, including simply because they may like that microphone’s characteristic noise.

144. Additional characteristics include impedance, sensitivity, maximum sound pressure level (“SPL”), and self-noise. Bartlett, supra note 12, at 104–05. These characteristics generally influence functionality and fidelity, which are unlikely to be held creative choices. For example, maximum SPL might be an important consideration when recording loud instruments; however, the external factor of the instrument’s loudness dictates the choice of a microphone with a higher maximum SPL. Nevertheless, these considerations also can have important creative ramifications. For example, sensitivity can determine how much detail is captured from a sound source. Similarly, engineers and producers may choose noisy microphones for various reasons, including simply because they may like that microphone’s characteristic noise.

145. Id. at 97.
146. Id. at 98.
147. Id. at 102.
148. Id. at 110. For example, some microphones have a “presence peak” around 5000 to 10,000 Hz that makes sounds “more crisp and articulate because it emphasizes the higher harmonics.” Id. at 103.
149. Id. at 98–101 (describing microphone polar patterns). The more the microphone “points” at a sound source, the more strongly that source is captured. As the source moves off-axis, it is captured less strongly. Cardioid microphones reject most strongly sound sources directly behind the microphone. Super- and hyper-cardioid microphones reject sounds from the sides most strongly. Bi-directional microphones capture equally those sounds directly in front of and behind the microphone, but reject sound sources to the side of the microphone. Id.
150. See Bartlett, supra note 12, at 56 (discussing directional microphones as a solution to dealing with echoes, reverb, and leakage).
high maximum sound pressure level, then an expressive contribution is unlikely. But if an engineer selects a microphone from among many microphones for aesthetic reasons, the resultant aesthetic may support cognizable expression.

B. The Soundstage

The soundstage is the sonic image created by the sound recording — the arrangement of all the recorded sounds from left-to-right, front-to-back, in relation to one another, and contained within some acoustic environment. In its earliest days, making a soundstage was an exercise in overcoming technological limitations to mimic reality as accurately as possible. Over time, modern recording techniques have come to require constructing a soundstage that had never previously existed in reality. Thus, constructing the soundstage can involve creatively arranging sounds akin to the photographer “composing the scene.”

1. From Mono to Stereo

Early recording technology was limited to “monophonic” recordings — a single transducer recording a live performance of one or more sound sources to a single track for playback through a single speaker. Consequently, there was no horizontal dimension. Additionally, engineers achieved a relative volume mix by positioning performers around the room at varying distances from the microphone. Vocalists might be closer because they needed to be louder; drummers might be farther away because they needed to be quieter. Creative choices were limited: an engineer could choose a microphone for better fidelity or frequency response or directionality, but such decisions had little bearing on the dimensions of the soundstage.

151. See supra note 37 and accompanying text (discussing sufficiency of decisions dictated by external factors).
152. Cf. supra note 140 and accompanying text (discussing camera and lens selection as a creative decision).
153. WILLIAM MOYLAN, THE ART OF RECORDING: UNDERSTANDING AND CRAFTING THE MIX 49 (2002) (“The sound stage is the perceived area within which all sound sources are located” and in which all sounds are “grouped by the mind to occupy a single area” that has “an apparent physical size of width and depth.”).
154. See supra notes 116–18 and accompanying text.
155. See supra notes 119–22 and accompanying text.
157. At least two tracks are required to create the impression of a horizontal dimension. See infra note 163 and accompanying text (discussing stereo recording and playback).
158. See About the National Jukebox: Acoustical Recording, supra note 156.
159. A monophonic recording can create the impression of “depth” by placing sound sources further away from the microphone, thereby capturing more room acoustics and less
Alan Blumlein at EMI Records invented stereophonic recording and playback in 1935, giving recorded sound a horizontal dimension. 160 Stereo recording generally involves placing two identical microphones at different angles from a sound source along the same horizontal plane. 161 Each microphone records a different balance of the source based on its position and orientation. The area between the microphones is not captured as strongly by either microphone; however, because both microphones capture it, the overlap creates a “phantom center.” 162 When played back, variances between the sounds captured by each microphone and the phantom center generate the left-right soundstage. 163

Even considering a simple situation such as stereo recording a live performance, there are creative decisions that might satisfy Mannion. Engineers might select microphones with directional characteristics that enhance or diminish the width of the soundstage or strength of the phantom center. They might place microphones in various alignments to accomplish the same or to emphasize certain sound sources. They might select microphones sensitive enough to capture performers’ nuances or ambient sounds. All these decisions are analogous to photography’s originality in the rendition.

Three additional inquiries are worthwhile. First, did the engineer believe she was making a creative decision or a decision to better capture the reality of the performance? If the latter, decisions made to enhance the verisimilitude of the performance are unlikely to be cognizable. 164 Second, are there external constraints like space restrictions in the venue that require certain microphones or placements? These external factors could dictate a certain decision.

timbral detail. See MOYLAN, supra note 153, at 28 (“Two impressions lead to the perception of the distance of a sound source from the listener: (1) the ratio of the amount of direct sound to reverberant sound, and (2) the primary determinant, the loss of low amplitude (usually high frequency) partials from the sound’s spectrum with increasing distance (definition of timbre or timbral detail.)” (emphasis in the original)).

160. OWSINSKI, supra note 119, at 21.
161. See BARTLETT, supra note 12, at 125–32 (discussing various stereo microphone configurations).
162. OWSINSKI, supra note 119, at 100.
163. See Sound Systems: Mono Versus Stereo, MCSQUARED SYS. DESIGN GROUP, http://www.mcsquared.com/mono-stereo.htm (last visited Oct. 6, 2012) (“[S]tereophonic sound systems have two independent audio signal channels . . . [with] a specific level and phase relationship to each other so that when played back through a suitable reproduction system, there will be an apparent image of the original sound source.”). Surround sound techniques later accomplished a similar, though less popular advance by adding more playback channels to bring the soundstage 360 degrees around the listener. Indeed, remastering stereo recordings in quadraphonic surround was among the most discussed aspects of the producer’s copyright. See NIMMER 1, supra note 6, § 2.10.
164. See supra notes 46–50 and accompanying text (discussing Bridgeman and Meshwerks).
and might need to be filtered from the analysis. Third, how does the engineer’s choice compare with the choice other engineers would make in similar situations? If most professionals would make the same choice, then the choice could be scènes à faire or unprotectably commonplace.

2. Panorama in Studio Recordings

When Les Paul pioneered sound-on-sound recording in 1949, he created the opportunity to record instruments individually and asynchronously. In studio recordings, engineers record sound sources in isolation during a “tracking stage” and, after the fact, place them in some volume and spatial relationship during a “mixing stage.” Consequently, assembling individual tracks into a mix requires fabricating a soundstage that had never existed in reality.

Someone must decide where to place each of the recorded tracks in the soundstage. The mix engineer is the most likely candidate. There may be times where the mix engineer is the only person present for the mix. Even when others attend, the mix engineer is generally in command of the mix because she is most familiar with the equipment. The mix engineer will set up an initial mix, and the artist or producer may later approve, disapprove, or say nothing about some or all of the decisions. One might argue that the mix engineer’s contributions merely provide the artist or producer with a professional opinion that can be accepted or rejected. However, the parties will

165. See supra note 37 and accompanying text (discussing sufficiency of decisions dictated by external factors). An example might be a requirement that the engineer use pre-selected and pre-placed “house” microphone setups for the recording.
166. See supra notes 35–36 and accompanying text (discussing unprotectably commonplace decisions and scènes à faire).
168. Id. at 42 (quoting Tom Dowd of Atlantic Records: “[W]e could make superior records if we were to record on multitrack tape because instead of reacting to the mix and trying to capture the performance in one hit, we could enhance it, relive it, improve parts and generally make a better tape . . . .” (internal quotation marks omitted); see also OWSINSKI, supra note 119, at 8 (describing the “[t]all, deep, and wide” approach to mixing: “[M]ake sure that all the frequencies are represented; make sure there’s depth to the mix, then give it some stereo dimension as well”).
169. See OWSINSKI, supra note 119; BARTLETT, supra note 12, at 289 (“In most rock recordings, the piano and drums are spread all the way between speakers — interesting but unrealistic.”).
170. See Butler, supra note 14, at 29.
171. For example, a producer or artist may want a set of instruments to play on the left side, but the mix engineer may disagree, insisting that they “pan to opposite sides any instruments that cover the same frequency range.” BARTLETT, supra note 12, at 289.
172. See Aalmuhammed, 202 F.3d at 1235 (holding insufficient Aalmuhammed’s contributions because Spike Lee had authority to accept or reject Aalmuhammed’s suggestions).
frequently defer to a mix engineer’s expertise in creating a pleasing blend of, or delineation between, all available tracks.\textsuperscript{173}

Not all soundstage decisions support a copyright interest. For example, some panning decisions are so commonplace that they should be insufficiently creative\textsuperscript{174}. In virtually every pop recording, the lead vocals, bass guitar, snare drum, and kick drum are dead center in the soundstage.\textsuperscript{175} Additionally, drums are generally recorded over multiple tracks, including a stereo set-up capturing the entire drum set. This stereo track (called the “overhead track”) is generally “hard panned”\textsuperscript{176} across the entire soundstage.\textsuperscript{177} Although someone must decide whether the drums should be panned to resemble the audience’s perspective when viewing the drummer or the drummer’s perspective when playing, there are only two options and thus the merger or \textit{scènes à faire} doctrine should preclude finding sufficient creativity in this decision.\textsuperscript{178}

3. Additional Soundstage Manipulations

Skilled producers and engineers can employ additional tricks to alter the soundstage. For example, sounds can move within the soundstage over the course of a song. A human being could pan a track by turning the pan knob as the mix is recorded to the stereo reduction.\textsuperscript{179} Engineers can also automate panning changes by using electronic devices that capture and reproduce panning motions or by drawing panning commands on the computer screen.\textsuperscript{180} Such panning likely invokes the “composing the scene” rationale for photography. Moreover, if the \textit{Alfred Bell} and \textit{Bleistein} theory controls, there might be a copyrightable contribution by virtue of the human-made panning motions captured in the final mix.\textsuperscript{181} Here, \textit{Bridgeman} and \textit{Meshwerks}...
would not necessarily apply because the panning action was not intended to reproduce motions that actually occurred in the real world.

VI. CONCLUSION

Claims of producers’ copyrights may accumulate in the looming termination controversy, the results of which could have an enormous impact on the shape of the music business. Congress has left us with precious little guidance in assessing such claims, and the guidance we have betrays an imperfect understanding of the record-making process. Thus, it will be up to those litigating and deciding these cases to “fix it in the mix.”

Record production is frequently an arcane art but an art nonetheless. Ultimately, authorship decisions may hinge on how well courts can understand the creative judgments involved in the record-making process and assess the complex and fluid relationships therein. Demystifying the process reveals a host of contributors and practically limitless opportunities to make contributions that could sustain an authorship interest. Coupled with a deeper knowledge of the record-making process, the framework outlined in this Note should help guide future inquiry.