Against Copyright Customization

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ABSTRACT: Copyright law gives copyright owners tremendous power over their users, but some of them want even more. Copyright law’s restrictions on the copying, distribution, adaptation, public performance, and public display of a work are broad, applicable to all stages within the stream of commerce and possession, and places liability on some third parties for merely assisting, benefiting, or encouraging an infringing activity. However, like any property-law based regime, those restrictions have limitations. The same law that gives copyright owners the power to restrict their users in multiple ways also has built-in boundaries, which means that not every action in connection to a copyrighted good is prohibited by copyright law.

Enter contract law. Some copyright owners, software companies in particular, try to use copyright license agreements to expand the rights provided by copyright law and customize them to their needs. They write standard form contracts that give them rights that are not provided for by copyright law, and nevertheless claim that the breach of those privately made arrangements triggers liability under copyright law. In that way, they turn copyright law from a system of strict rules, created by Congress, that balances between the interests of copyright owners and users to one that they can shape as they see fit for their needs.

Courts have struggled and mostly failed in preventing copyright owners from using licenses in that way. This Article explains that the leading approach for policing such licenses was shaped in 2010 by two Ninth Circuit decisions: Vernor v. Autodesk, Inc. and MDY Industries, LLC v. Blizzard
Entertainment, Inc. This framework, however, missed the mark. This Article shows how both opinions are misguided as a matter of law and harmful as a matter of policy. They, unfortunately, give too much power to large software companies and too little freedom to their consumers. Moreover, a study of the 46 cases that applied MDY’s test, which was supposed to curb the software companies’ power, reveals that courts could not come up with clear criteria or an effective test to limit that power. Other developments in recent years, including new decisions of the Supreme Court and the Second Circuit, further weakened the Vernor-MDY framework. Those recent developments, as well as the increased centrality of digital distribution channels, make this the perfect time to reevaluate and abandon the currently prevalent framework.

This Article shows that core notions of commercial law offer a superior approach to police those licenses in a way that is consistent with copyright policy. Indeed, if the core principles of contract and property law are correctly applied, the balance between copyright law and contract law can be maintained. With it, copyright liability is restored to the scope intended by Congress, and its expansion through customization is successfully restricted.

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I. INTRODUCTION

We are all heavy users of copyrighted goods. We visit websites, play video games, buy books and e-books, watch online movies, stream music, and more. Indeed, copyrighted goods play a vital role in our lives and our economy.

This Article deals with the tension between copyright users, meaning all of us, and copyright owners, focusing on how the latter try to impose
idiosyncratic non-standardized restrictions on their consumers’ use.\(^1\) Examples are abundant. Book publishers might sell discounted books in developing countries while trying to prevent their buyers from importing them to developed countries.\(^2\) A company might create and distribute a new font while attempting to prevent the use of that font to disparage the company.\(^3\) Some young artists might sell their paintings while striving to prevent their buyers from flipping the work, meaning quickly reselling it at a large profit.\(^4\) Other copyright owners might want to restrict certain use that simply competes with their own business.\(^5\)

While attempts to impose long-term restrictions on consumers are not unique to any one industry, software companies, as well as creators of digital goods, are engaged in those techniques significantly more extensively and broadly than others. The exponential increase in the importance of those industries in our digital world makes such use restrictions even more salient.\(^6\) In some respects, attempts to restrict users of software are nowadays the norm and not the exception. To give just a few examples, software companies often want to prevent buyers of bundled products (e.g., Microsoft Office) from reselling individual products separately.\(^7\) Similarly, they restrict purchasers of

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1. As further explained below, this problem of long-term post-sale control is becoming more significant in recent years and will likely take an even more central stage going forward. However, in the abstract, this is not a new phenomenon. Sellers have been trying to control certain aspects concerning the use of their products for centuries. This issue was discussed in English courts at least as early as the fifteenth century. See, e.g., Edward Coke, The First Part of the Institutes of the Laws of England 223 (London, Adam Islip 1628) (discussing fifteenth-century cases on this matter).


6. See Margot E. Kaminski & Guy A. Rub, Copyright’s Framing Problem, 64 UCLA L. Rev. 1102, 1116–17 (2017); Aaron Perzanowski & Jason Schultz, Digital Exhaustion, 58 UCLA L. Rev. 889, 890–91 (2011). Digital distribution has become even more prevalent during the COVID-19 crisis, as the pandemic significantly overburdens tangible modes of distribution and encourages extensive digital home consumption.

discounted students’ versions from reselling to non-students. Video gaming companies might want to dictate specific rules concerning how their users play online games. Even some of those who try to encourage greater dissemination of software—like the open-source software movement—attempt to accomplish their goals by preventing their users from taking actions that will hinder software distribution.

At its core, copyright law is a legal system that allows creators (and their assignees) to restrict their users’ actions with respect to their works in an effective and powerful way. If Alice holds the copyright in a book, nobody, not even authorized purchasers of the book, is free to copy it, translate it, read it aloud in public, and so on. Alice’s rights under copyright law often trump her users’ rights under various other legal doctrines, including personal property law, and the Free Speech Clause of the First Amendment.

The rights under copyright law are backed up by powerful enforcement mechanisms. As a property right, copyright law provides a cause of action against those who come in contact with the copyright owner as well as strangers. Copyright owners can successfully sue those who engage in infringing activities, as well as those who knowingly assist them, and, under some circumstances, those who encourage them or benefit from the infringing activity. And once copyright owners win a lawsuit, they are entitled to broad remedies, including actual damages, disgorgement, statutory damages, and injunctions.

But copyright law, while powerful, is neither limitless nor fully customizable. Like most property-based regimes, copyright law is standardized

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9. See MDY Indus., LLC v. Blizzard Ent., Inc., 629 F.3d 928, 934–36 (9th Cir. 2010).
11. See, e.g., Jacobsen v. Katzer, 535 F.3d 1375, 1379 (Fed. Cir. 2008); see also Clark D. Asay, Software’s Copyright Anticommons, 66 EMORY L.J. 265, 275–79 (2017) (explaining that even those movements that seem to oppose applying copyright to software rely on restrictive copyright licenses to promote their goals).
15. See infra Section II.B.2.
18. This notion concerning the standardization of property rights exists in all legal systems and is often referred to, especially in civil law countries, as the *numerus clausus* principle. See
and includes built-in limitations on the power of copyright owners. The scope of copyright is thus inherently strict. For example, copyright law does not limit any use of copyrighted goods that does not entail one of the exclusive rights under copyright law: copying, adaptation, distribution, public performance, and public display. Indeed, there is nothing within copyright law that prevents users from playing a song in a non-public forum, fast forwarding a movie, or destroying a book. Moreover, many actions involving an exclusive right fall under one of the defenses to copyright infringement. For example, under certain circumstances, the fair use doctrine allows users to create copies of TV shows and to adapt songs, and the first sale doctrine allows buyers to import and resell books.

Copyright license agreements, however, might undermine copyright law’s inherent strictness and thus destabilize the balance that copyright law creates between copyright owners and copyright users. Those licenses are contracts, and as such, the parties thereof are free to set forth almost any


19. See infra Section II.B.1.
24. Kirtsaeng v. John Wiley & Sons, Inc., 568 U.S. 519, 553–54 (2013). There are additional limitations on the scope of copyright law, including, most importantly, those set forth in 17 U.S.C. § 102(b) (“In no case does copyright protection . . . extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery . . . .”).
25. Copyright licenses have been subject to increased scholarship attention in recent years. For some examples of this trend, see generally BJ Ard, Notice and Remedies in Copyright Licensing, 80 Mo. L. Rev. 513 (2015); Omri Ben-Shahar, Damages for Unlicensed Use, 78 U. Chi. L. Rev. 7 (2011); Joshua A.T. Fairfield, Nexus Crystals: Crystallizing Limits on Contractual Control of Virtual Worlds, 38 WM. MITCHELL L. REV. 43 (2011); Robert W. Gomulkiewicz, Is the License Still the Product?, 60 Ariz. L. Rev. 425 (2018); Michael E. Kenneally, Commandeering Copyright, 87 Notre Dame L. Rev. 1179 (2012); Nancy S. Kim, Revisiting the License v. Sale Conundrum, 54 Loy. L.A. L. Rev. 99 (2020); David McGowan, The Tory Anarchism of F/OSS Licensing, 78 U. Chi. L. Rev. 207 (2011); Christina Mulligan, Licenses and the Property/Contract Interface, 93 Ind. L.J. 1073 (2018); and Christopher M. Newman, A License Is Not a “Contract Not to Sue”: Disentangling Property and Contract in the Law of Copyright Licenses, 98 Iowa L. Rev. 1101 (2013). For some examples of recent scholarship debate that addresses the broader issue of IP right-holders’ ability to exercise long-term post-sale control over their works and inventions, see generally Perzanowski & Schultz, supra note 13; Glen O. Robinson, Personal Property Servitudes, 71 U. Chi. L. Rev. 1449 (2004); Guy A. Rub, Rebalancing Copyright Exhaustion, 64 EMORY L.J. 741 (2015); and Molly Shaffer Van Houweling, The New Servitudes, 96 Geo. L.J. 885 (2008).
26. A license does not have to be a contract. It can be a unilateral grant revocable at will. Newman, supra note 25, at 1109–04. However, all the licenses discussed in this Article, like almost all the licenses considered in copyright litigation, are supported by consideration, and are part of a contract.
arrangement, including prohibiting users from taking actions that copyright law itself does not disallow. 27 As a matter of contract law, and subject to minor exceptions, those idiosyncratic arrangements are enforceable. 28 However, they provide the copyright owner with the limited enforcement mechanisms that are part of contract law. The breached-against party is entitled to expectation damages, but not much more. 29 For example, as a general matter, contract law does not provide a cause of action against third parties, even if they assist the breaching party. 30

This Article, however, shows that if the breach of an idiosyncratic license triggers liability under copyright law, the built-in limitations and the standardization that are inherent to copyright law might be circumvented. This possibility is especially troubling when large corporations use standard form agreements to force a sizable group of users to accept their terms of use. 31 With those boilerplate agreements, corporations can summon copyright law’s powerful enforcement mechanisms at will to crush activities that copyright law is not supposed to prohibit.

In June 2020, Goldman Sachs, one of the world’s largest investment banks, introduced a new font that it named “Goldman Sans” and described as “approachable without being whimsical.” 32 The font was distributed together with a license that stated that anyone could use it, but only as long as the use does not disparage the company. 33 On the one hand, as a contractual limitation, this restriction is almost meaningless. While those that use the font to disparage Goldman Sachs breach the contract, the company will struggle to prove it suffered any compensable damages under contract law. On the other hand, if disparaging the company using the new font is copyright infringement, Goldman Sachs will be entitled to broad remedies, including

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27. This Article focuses on copyright litigation when contracts are involved. A separate but related question is whether copyright law should affect the enforceability of contract law claims under state law. While the Article will briefly comment on the topic, see infra Section V.C, a full analysis of this aspect of the copyright-contract tension, which I have covered in my previous work, Guy A. Rub, Copyright Survives: Rethinking the Copyright-Contract Conflict, 103 VA. L. REV. 1141 (2017), is outside of the scope of this Article.

28. See infra Section II.A.1.


30. See infra Section II.A.2.


32. Wagner & Stein, supra note 3.

33. Id. This provision was later removed from Goldman Sachs’ license. Id.
injunctions and statutory damages up to $150,000. However, copyright law is not designed to squash criticism. In fact, the Copyright Act explicitly mentions "criticism" as a type of use that is typically fair and thus allowed. Therefore, if Goldman Sachs can summon copyright liability against those who infringed its license, it can use the license to undermine copyright’s balance between permitted and prohibited use.

Software companies often use licenses to try and create copyright liability in connection with actions that their users take and that copyright law is not supposed to prohibit. Autodesk and Adobe, for example, distribute their software with a license that significantly limits future distribution. Some of their licenses do not allow resale at all, while others allow it, but only in specific regions or subject to additional restrictions. While the Copyright Act states that buyers of copyrighted goods can freely transfer them to others, Autodesk and Acrobat claimed in separate cases that when their users breach their form agreements, they also commit copyright infringement. Similarly, Blizzard, one of the world’s largest video game companies, requires its users to agree not to use additional software tools, and in particular bots, when playing its games. While the Copyright Act does not prohibit such use, Blizzard sued, claiming that World of Warcraft players are copyright infringers when they use bots in breach of the company’s End Use License Agreement (“EULA”).

Indeed, Autodesk, Adobe, and Blizzard, like many other software companies, claim that if their users breach their contracts, they are also copyright infringers and thus subject to the extensive remedies that are part

35. 17 U.S.C. § 107 (listing “criticism” as an example of fair use); Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 579 (1994) (discussing the social value of criticism as justifying holding it as fair use); Wendy J. Gordon, Fair Use as Market Failure: A Structural and Economic Analysis of the Betamax Case and Its Predecessors, 82 Colum. L. Rev. 1600, 1632–35 (1982) (discussing how copyright law should not be used to support the owner’s “antidissemination motives”).
36. See infra Section V.D.4 (discussing this hypothetical).
37. While the caselaw focuses on software companies, who have been engaged in this practice for years, the same technique can be used by any provider of digital goods, like e-books, digital images, or websites. Those practices sometimes lead to litigation. E.g., Ticketmaster LLC v. Prestige Ent. W., Inc., 515 F. Supp. 3d 1147 (C.D. Cal. 2018) (dealing with restrictions on the use of a website). The growing importance of digital goods in the digital age will likely lead to more litigation involving such goods in the years to come.
39. See, e.g., Blue Source Grp., Inc., 125 F. Supp. 3d at 954.
42. MDY Indus., LLC v. Blizzard Ent., Inc., 629 F.3d 928, 938 (9th Cir. 2010).
43. Id. at 935.
of copyright law. 44 As a legal matter, this claim is based on the companies’ assertion that they are not selling the software but only licensing it, and therefore, their users are not entitled to a host of defenses that the Copyright Act provides to buyers. 45 Unfortunately, without those defenses in place, the users are placed at the mercy of the software companies and their self-serving licenses. Without those defenses, most actions that users take need to be authorized by a license or else be considered infringing. 46 Using that scheme, software companies customize copyright law and adjust it to their idiosyncratic needs.

If those companies are right, they are provided with the legal power—one that Congress never meant to give copyright owners—to set forth the exact terms of use of their products and to crush any other usage. 47 In other words, this legal construction allows those companies to cloak the breach of their non-standardized contractual terms with copyright law liability. Instead of triggering the weak enforcing mechanisms under contract law, the breach of those terms now brings the hammer of copyright liability down on such use.

Federal courts have struggled mightily to curb this encroachment into copyright policy and to make sure that copyright owners, and in particular software companies, are not allowed to use copyright law to enforce idiosyncratic limitations on their users. 48 Specifically, while it is typically apparent that a breach of the license agreement creates liability under contract law, courts and commentators have wrestled to develop a test as to when that breach is also copyright infringement. 49

This issue involves difficult questions that are part of both federal copyright law and state commercial law. The complexity of those matters might explain the inconsistencies in the caselaw and the multiple inaccurate statements and questionable turns that courts have taken throughout the years. Untangling this problem and restoring coherency to the caselaw requires a deep dive into normative and policy questions of both federal and state law.

The main approach to assess the legal implications of a breach of copyright license agreements—a question that was described “as ‘among the knottiest’ in intellectual property adjudication” 50—is what this Article calls the

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44. See infra Section III.B.
45. See infra Section III.B.
46. See infra Section III.B.
48. See infra Section III.B.
49. See infra Section III.A.
50. Ben-Shahar, supra note 25, at 7 (emphasis added) (quoting MELVILLE B. NIMMER & DAVID NIMMER, 3 NIMMER ON COPYRIGHT § 12.01[A] (Matthew Bender ed., 2010) [hereinafter NIMMER ON COPYRIGHT]).
Vernor-MDY framework. It is named after two important 2010 Ninth Circuit decisions, which are broadly followed within the Ninth Circuit jurisdiction and outside of it. The first of those decisions, *Vernor v. Autodesk, Inc.*, gave copyright owners, and especially software companies, tremendous power to impose flexible and powerful idiosyncratic restrictions on their users. The second decision, *MDY Industries, LLC v. Blizzard Entertainment, Inc.*, published by the same panel just three months later, tried—and as we shall see, failed—to curtail that power.

This Article shows that the Vernor-MDY framework fell flat. It explains that both opinions were problematic from their inceptions and that the decade that followed their publications undermined them even further. The Article suggests that in *Vernor*, the Ninth Circuit (unfortunately, like several other courts) misconstrued the nature of certain transactions over copyrighted goods and, in doing so, misapplied traditional notions on property law. Then, when the Ninth Circuit attempted in *MDY* to fix *Vernor*’s shortcoming, it misconstrued core doctrines of the common law of contracts and blended them, in a poorly explained way, with principles of copyright policy. More importantly, the result of this awkward reasoning was normatively meaningless and provided little guidance to lower courts.

This Article presents the result of a study of the decade of caselaw that followed the formation of the Vernor-MDY framework that further demonstrates its weakness. It focuses on the impacts of MDY to examine whether it succeeded in providing users with any meaningful power to counterbalance the tremendous power that copyright owner received in *Vernor*.

The result is chaotic. There are 46 opinions that used *MDY* in attempting to decide when a breach of a license agreement triggers copyright liability. None of those opinions provided any normative meaning to the Ninth Circuit opinion in *MDY*. For example, the caselaw cannot even consistently answer a simple and often-litigated question: can licensors sue for copyright infringement licensees who failed to pay their licensing fees? A little more than half of the cases say they cannot, but almost as many say they can. Surprisingly, the common approach among district courts is to quote the

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52. *Vernor* v. Autodesk, Inc., 621 F.3d 1102, 1111 (9th Cir. 2010).

53. *MDY* Indus., LLC v. Blizzard Ent., Inc., 629 F.3d 928, 941 (9th Cir. 2010).

54. *Infra* Section IV.A.

55. *Infra* Section IV.B.2.

56. *Infra* Section IV.B.1.

57. *Infra* Section IV.C.


59. *Infra* text accompanying notes 238–41.
Ninth Circuit decision in MDY but to then de facto ignore it.\textsuperscript{60} The implications are that the faith of copyright claims is often decided by the identity of the judges who hear them and their (conflicting) intuitions.

The Vernor-MDY framework is also in tension with recent Supreme Court decisions and in direct conflict with the latest Second Circuit caselaw,\textsuperscript{61} creating a circuit split between the two most important copyright appellate courts in the country.\textsuperscript{62} Indeed, in two important recent cases, the Supreme Court stressed the importance of interpreting and applying federal intellectual property law in a way that is consistent with the common law.\textsuperscript{63} Unfortunately, both Vernor and MDY failed to do that. More crucially, in an important recent patent law decision, the Court held that patentees cannot—with a stroke of a pen—impose idiosyncratic use restrictions and back them up with patent law remedies.\textsuperscript{64} But Vernor allows copyright owners, and especially software companies, to do just that: to impose practically any idiosyncratic restriction on their users and to back it up with copyright law remedies. If the Supreme Court disallowed patent customization in this way, there is little reason to allow copyright to be customizable. The Article points to this tension, which is not yet fully appreciated by litigants, user advocacy groups, and courts.\textsuperscript{65}

This Article thus proposes that the Vernor-MDY framework be abandoned. In MDY, the Ninth Circuit tried, and failed, to address the self-inflicted wound that it caused in Vernor, where it undermined the Copyright Act’s built-in balancing mechanism. But this Article shows that two wrongs do not make a right, and that MDY failed to fix, and probably cannot fix, the damage that Vernor caused. The power it gave to copyright owners, and in particular software companies, is unjustified and inconsistent with both copyright law and copyright policy.

This Article offers a different and superior framework—which it labels “a commercial law approach”—for deciding when a breach of a license leads to copyright infringement.\textsuperscript{66} It calls courts to rely on contract and property law principles more closely in dealing with copyright license agreements and to allow copyright owners to create idiosyncratic arrangements as a matter of contract law. However, the Article shows that there is no reason to allow the

\begin{footnotesize}
\textsuperscript{60} Infra text accompanying notes 223–37.
\textsuperscript{61} Universal Instruments Corp. v. Micro Sys. Eng’g, Inc., 924 F.3d 32, 44–46 (2d Cir. 2019).
\textsuperscript{62} Mark A. Lemley & Eugene Volokh, Freedom of Speech and Injunctions in Intellectual Property Cases, 48 DUKE L.J. 147, 161 (1998) (pointing to the importance of the Second and Ninth Circuits in developing copyright law).
\textsuperscript{64} Lexmark, 137 S. Ct. at 1533.
\textsuperscript{65} Infra Section IV.D.
\textsuperscript{66} Infra Section V.A.
\end{footnotesize}
breach of non-standardized contractual terms to trigger liability under copyright law. In other words, even if users breach a license, they should be liable for a breach of the contract and subject to the modest remedies under contract law.

The framework that this Article proposes balances between copyright and contract claims in a relatively simple way that is rooted in commercial law principles and is consistent with the spirit of recent Supreme Court caselaw. The consistency with commercial law will make it easier to apply without the confusion that permeates the Vernor-MDY framework’s caselaw. It allows copyright law to rely on centuries of commercial law caselaw. It is faithful to statutory interpretation canons, and it fulfills Congress’ intent in enacting statutory defenses.

This Article proceeds as follows. Part II lays the theoretical foundations for this work by exploring how property law and contract law allow sellers to restrict their consumers’ actions in certain ways but not in others. The Part explains that there are sound public policy justifications for keeping those routes separated. Specifically, it is inefficient and undesirable to allow copyright owners to impose use restrictions that are both idiosyncratic like contracts (meaning, non-standardized and customizable) and backed-up by powerful enforcement mechanisms like property rights (for example, enforceable against the world).

Part III introduces the Vernor-MDY framework as the leading approach to determine the legal implications of a breach of copyright license agreements. Part IV focuses on the failure of that framework. It starts by exploring the doctrinal and normative weaknesses of both opinions. It then introduces the study into the 46 opinions that tried and failed to apply them. It concludes by arguing that this framework is inconsistent with the spirit, if not the text, of recent Supreme Court intellectual property (“IP”) caselaw and is in direct conflict with recent Second Circuit caselaw.

Part V introduces the commercial law approach, which allows copyright owners to impose use restrictions as a matter of contract law but limits their ability to customize copyright law and make it impose such restrictions. That Part concludes by applying this approach to various common and threatening use restrictions and demonstrates how, subject to certain limitations, it can achieve a reasonable balance between federal contract law and state

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68. *See infra* text accompanying note 352.
69. *Infra* Section II.C.
70. *See infra* text accompanying notes 129–32.
71. *Infra* Section IV.C.
commercial law and, more importantly, between the rights of copyright owners and those of copyright users.72

II. Restricting Users Through Contracts and Copyright

As discussed in the Introduction, copyright owners (like many other sellers) often want to limit how their consumers use the goods they provide. The law gives them two main tools to do so.73 They can use contractual arrangements or rely on property law, and in particular, copyright. This Part briefly explores those two routes. Section A explains how contracts can be used to restrict users in a way that is flexible and non-standardized but also backed up by relatively weak enforcement mechanisms. Section B presents the alternative: using property law, and in particular copyright’s stricter legal norms, to impose use restrictions that, while standardized, are backed up by powerful legal enforcement tools. Section C points to sound policies for keeping those two separated, and in particular not to allow copyright owners to impose use restrictions that are both flexible and powerful. The table below summarizes those legal routes for imposing use restrictions:

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<th>The Property-Copyright Route</th>
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<td>Strict: Standardized</td>
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A. The Contractual Route: Flexible & Weak Use Restrictions

1. Contracts’ Flexibility

Contract law allows parties to establish legal norms that, subject to minimal limitations (discussed below), courts enforce.74 As contractual norms can limit the parties’ freedom with respect to (almost) any legal right, they can and often do limit the ways in which consumers can use their purchased goods.

72. Infra Section V.D.
73. Copyright owners (and other promisers of information goods) can also use non-legal tools to control their consumers’ use. For example, they can encrypt their software and allow users to take only certain actions and not others. See, e.g., Niva Elkin-Koren, Making Room for Consumers Under the DMCA, 22 Berkeley Tech. L.J. 1119, 1125 (2007). A full analysis of those tools is beyond the scope of this Article.
74. RESTATEMENT (SECOND) OF CONTRACTS § 1 (AM. L. INST. 1981) (“A contract is a promise . . . for the breach of which the law gives a remedy . . . .”).
As the Introduction shows, there are multiple examples for contracts that limit the ways in which consumers use their purchased copyrighted goods. For example, buyers accept contractual restrictions on their abilities to transfer such goods. Buyers of software, to give another example, often consent to exceptionally broad restrictions, including on the platform in which they will run the software and on how other software will engage with it.

As far as contract law is concerned, use restrictions can be as idiosyncratic as the parties want them to be. The parties can state that a user will play a video game only when she wears a red shirt or that she will refrain from playing it on Sundays. As long as a contractual defense is not triggered, and those, as we shall soon see, rarely are, contractual norms can encompass any use restriction imaginable.

Standard form agreements are an especially valuable tool for manufacturers’ and sellers’ attempts to impose use restrictions. Those agreements are written by one party, typically the copyright owner, and are accepted, without negotiation, by all consumers as a condition for receiving or accessing the goods. In that way, copyright owners can set forth a broad contractual scheme that applies to all their consumers.

The defenses against contractual use restrictions are narrow and typically reserved for extreme situations. The main defense within contract law in this context is unconscionability. Under this principle, courts refrain from enforcing unconscionable contracts, often standard form agreements, whose terms “shock the conscience.” As the rationale for the doctrine is “the prevention of oppression and unfair surprise,” one might imagine it being applied to strike down certain surprising use restrictions imposed by copyright owners. However, in practice, I am unaware of any case in which the doctrine was successfully used in that way. The reason is likely rooted in the high threshold for finding unconscionability, which is preserved for only extreme cases that “shock the conscience” or that are “outrageous.” As Professor Allan Farnsworth summarized, “judges have been cautious in applying the doctrine of unconscionability, recognizing that the parties often must make their contract quickly and that their bargaining power will rarely be equal.”

75. See, e.g., Adobe Sys. Inc. v. Blue Source Grp., Inc., 125 F. Supp. 3d 945, 954 (N.D. Cal. 2015) (discussing a contract that restricted the transferability of students’ software to non-students).

76. See Rakoff, supra note 31, at 1177 (explaining the characteristics of standard form agreements).


81. E. ALLAN FARNSWORTH, CONTRACTS 302 (4th ed. 2004); see also Robert M. Lloyd, Making Contracts Relevant: Thirteen Lessons for the First-Year Contracts Course, 95 ARIZ. STATE L.J. 257, 267 (2004) (“[Y]ou can win an unconscionability case if your client is poor and uneducated, and if the other party is a sleazy organization that preys on poor people . . . . But absent these
Unconscionability is not the only possible applicable contractual defense. However, other defenses that come to mind, like misrepresentation or the public policy doctrine also require a high threshold.\textsuperscript{83} Courts understand the importance of the freedom of parties to contract, and thus typically enforce their agreements.\textsuperscript{84}

The conclusion is that while, in theory, courts can use contractual defenses to free users from the restrictions they agreed to, judges are unlikely to do so. In fact, unconscionability was raised as a defense only once in the 46 use-restriction cases that will be discussed in Section IV.C.\textsuperscript{85} Other contractual defenses were not raised at all.

Other defenses can be found outside of contract law. For example, some may argue that certain use restrictions might be preempted as they conflict with copyright law’s principles, such as the first sale doctrine. Under the doctrine of copyright preemption,\textsuperscript{86} which will be further discussed below,\textsuperscript{87} courts may refuse to enforce contracts that undermine federal copyright policy. However, the vast majority of courts held that contracts are never preempted because they create personal rights and not property rights.\textsuperscript{88}

Indeed, while defendants in a breach of contract lawsuit have numerous defenses at their disposal, at least when it comes to use restrictions, they are overall narrow. Those defenses rarely allow defendants to escape, as a matter of contract law, the implications of the contracts they accepted. The contractual route thus provides a tool to create flexible and enforceable restrictions on consumers’ use. While it is relatively easy to impose liability for a breach of contract, the next Section shows that the effect of such liability is limited and that contract law often cannot effectively restrict users.
2. Contracts’ Enforcement Ineffectiveness

While contract law allows copyright owners to impose non-standardized restrictions on their users, it offers them a limited set of enforcement tools. The main limitation has to do with contractual privity, meaning that contractual rights are enforceable only against those who are parties to the contract.\(^89\) Maintaining and proving privity can be tough. Even if the seller can guarantee that the initial buyer accepts the contract as part of the sale transaction, it is significantly more challenging to guarantee acceptance by downstream buyers.\(^90\) As a result, it might be difficult to control, as a matter of contract law, the ways in which all consumers use their purchased products.\(^91\)

The limitation on contractual remedies provides another obstacle to those who try to implement a broad contractual scheme to control their users’ activities. The main remedy for a breach of contract is expectation damages. That measure reflects the actual proven harm suffered by the plaintiff.\(^92\) The remedy, however, creates only limited deterrence against a breach, especially when the breach or harm is difficult to detect and prove.

Contract law’s flexibility does not extend to remedies for breach. Liquidated damages provisions are unenforceable unless they satisfy certain tests that are designed to make the damages a reasonable proxy of the actual harm.\(^93\) The parties are not free to contract around those tests. Specifically, it is well established that the parties are not allowed to elect punitive damages as a remedy for breach.\(^94\)

That makes contract law less effective in certain situations, especially when the harm is difficult to prove and when it is diffused, such as when many breaching parties are each causing a small injury, that is aggregated into significant damage. This is, however, a typical scenario when it comes to information goods. The harm of unrestricted use of information goods, such


\(^90\) Sellers can try to guarantee that downstream users accept the agreement by attaching them to the product itself. Click-wrap agreements that pop-up every time software is installed is an example of such a scheme. Peggy Radin famously named those agreements “viral contracts.” Margaret Jane Radin, Humans, Computers, and Binding Commitment, 75 IND. L.J. 1125, 1132 (2000).

\(^91\) Rub, supra note 27, at 1209-10.

\(^92\) Freund v. Wash. Square Press, Inc., 314 N.E.2d 419, 420–21 (N.Y. 1974); RESTATEMENT (SECOND) OF CONTS. § 347 (A M L. INST. 1981). Contract law allowed other less-common remedies, such as specific performance and restitution and reliance damages. Id. §§ 349, 357–377. However, unless the defendant’s behavior is tortious, courts will not grant punitive damages, and statutory damages are not available. Id. § 355; U.S. Naval Inst. v. Charter Commc’ns, Inc., 996 F.2d 692, 696 (2d Cir. 1993) (“Punitive awards are not part of the law of contract damages.”).

\(^93\) ROBERT A. HILLMAN, CONTRACT LAW 176–77 (2d ed. 2009).

\(^94\) E.g., FPL Energy, LLC v. TXU Portfolio Mgmt. Co., 426 S.W.3d 59, 69 (Tex. 2014) (“W)e will not enforce punitive contractual damages provisions.”).
as copyrighted goods, is often hard to assess, and it is often caused by many
users, each contributing a small injury.\footnote{Rub, supra note 27, at 1214.}

An example may illustrate those limitations. Consider a publisher who
sells books at different prices in different countries. The publisher might want
to offer cheaper books in developing countries, but it might be worried that
buyers in those countries will import and resell them in developed countries.\footnote{See Guy A. Rub, \textit{The Economics of Kirsaeng v. John Wiley & Sons, Inc.: The Efficiency of a Balanced Approach to the First Sale Doctrine}, 81 FORDHAM L. REV. RES GESTAE 41, 42 (2013) (discussing this pricing strategy).}

It is doubtful that contract law can effectively prevent this form of arbitrage.
The publisher can draft a form agreement forcing buyers to promise not to
resell the book in another country. This, however, might not de facto prevent
resale. For example, even with this scheme in place, the publisher may not be
able to sue an individual that resells books in a developed country that were
initially sold cheaply in a developing country. The publisher might not be able
to prove that the reseller accepted the contract. After all, it is possible that the
reseller purchased used books, which means it didn’t accept the contract. And
even if privity can somehow be proven, the remedies would be very modest in
each case: expectation damages, which will be, at most, the difference
between the prices of an expensive and a cheap book. Moreover, if the
publisher finds out that a third party is purchasing a large number of cheap
books from their original buyers and sells them in developed countries, its
hands would be tied. It has no contractual cause of action against such a third
party.\footnote{In theory, the publisher might have a cause of action in tort law for tortious interference
in contractual relations, but such a claim is quite problematic. First, it requires the initial resellers
to breach the contract, and it is not clear that selling to a third party is indeed a breach. Second,
the publisher will need to prove that the third party knew about the breach. And third, and most
important, this cause of action is likely preempted by the Copyright Act. See Harper & Row,
Publishers, Inc. v. Nation Enters., 723 F.2d 195, 201 (2d Cir. 1983); Rub, supra note 27, at 1163.}

Elsewhere I explored in depth the use of contracts to control the flow of
information goods. I have noted the limited role that those contracts can play
in regulating the relationship between businesses and consumers.\footnote{Rub, supra note 27, at 1198–99 (identifying 279 cases where parties defended a contractual claim by arguing that it is preempted by copyright and noting that all of them concerned business-to-business transactions).}

My conclusion there applies here as well: “[C]ontracts are not an effective tool to
exercise [a] tight control . . . over [the use of] information and information
goods” on a large scale.\footnote{Id. at 1209.} Indeed, while they are flexible, contracts are also weak.
B. THE COPYRIGHT ROUTE: STANDARDIZED & POWERFUL USE RESTRICTIONS

1. Copyright Standardization

Copyright law, like any property-rights regime, grants owners strict standardized legal entitlements that are backed up by powerful enforcement mechanisms. In its first-ever copyright decision, the Supreme Court clarified that copyright owners are entitled solely to the rights that the Copyright Act prescribes. The Copyright Act provides that copyright owners have exclusive rights to authorize only five actions with respect to their works: their (1) reproduction; (2) adaptation; (3) distribution; (4) public performance; and (5) public display. In other words, as long as a user is engaged in an activity that does not involve one of those activities—commonly referred to as the exclusive rights—the seller has no cause of action under copyright law.

Moreover, even if users are engaged in one of the exclusive rights, their actions might be exempted from liability by one of the many defenses for copyright infringement. For example, under the first sale doctrine, the buyer of a legally made copy of a copyrighted work has a right to transfer the copy to others regardless of the copyright owner’s exclusive right to control distribution. Thus, the owner of copyright in a book or a picture cannot use copyright law to restrict a buyer who wishes to resell the purchased copy.

The case of Supap Kirtsaeng is the perfect example for those defenses, their growing importance, and the built-in limitations they impose on the scope of copyright. Kirtsaeng purchased cheap casebooks in Thailand and then imported and resold them, for a large profit, in the United States. Multiple publishers sued Kirtsaeng for copyright infringement. However, the Supreme Court interpreted the first sale doctrine broadly to cover those actions, and the case was dismissed. The publishers were left with no cause of action under copyright law against Kirtsaeng.

Indeed, copyright law includes built-in limitations that does not allow copyright owners to customize it to their needs and impose liability for any activity they consider undesirable. However, the next Section explains that unlike contractual claims, once liability is established under copyright law, copyright owners are armed with powerful and effective enforcement tools.

100. Wheaton v. Peters, 33 U.S. 591, 662 (1834) ("[I]f the right of the complainants can be sustained, it must be sustained under the acts of [C]ongress.").
104. Id. § 109(a).
106. Id. at 526–27.
107. Id. at 554.
2. Copyright Enforcement Strength

While the rights under copyright law are standardized by law and cannot be freely customized by copyright owners, they are backed up by powerful enforcement mechanisms. Once a consumer takes an action that is an exclusive right but that is not covered by one of the defenses to copyright infringement, that user is subject to a host of broad remedies that goes well beyond the remedies for a breach of contract. They include equitable remedies, including injunctions and impounding, and damages that are considerably broader than expectation damages under contract law. On top of compensating for the damage they suffered, copyright owners can disgorge the benefits the infringers received from the infringement. Alternatively, copyright owners can choose to receive statutory damages that can be as high as $150,000 for any work infringed. Finally, the copyright owner can also be refunded its legal costs, including attorney’s fees.

The strength of copyright’s enforcement mechanisms goes well beyond the remedies for infringement. First, copyright is a right against the world. This means that everyone is subject to the right, whether the defendant ever interacted with the copyright owner. The right is thus automatically enforceable along the stream of possession with no need to maintain a chain of privity. Second, copyright is a strict liability regime. Therefore, defendants can be considered infringers even if their actions were unintentional, accidental, or even subconscious.

Third, multiple copyright law doctrines allow copyright owners to sue third parties that were only indirectly involved in the infringing activity. Knowingly aiding or contributing to an infringement might be considered contributory infringement. Encouraging infringement can amount to inducement. Refraining from exercising a right to control an infringing activity can result in vicarious liability if the defendant has a financial interest.
in that activity. The contributor infringer, the inducer, and the vicarious infringer are considered copyright infringers and are subject to its broad remedies.

Those tools work in tandem to provide copyright owners with effective mechanisms to enforce their rights against powerful (and often wealthy) intermediaries that facilitate infringement by others. By providing a cause of actions against intermediaries, copyright law solves the problem that was examined with respect to contract law: the practical inability to enforce mass contracts when many parties engage in activities that cause small individual harm that is aggregated to a major injury.

C. THE POSSIBLE POLICIES JUSTIFYING THE CONTRACT-PROPERTY DIVIDE

The previous Sections showed that the law offers two distinguished routes for restricting users of copyrighted works: the flexible and weak contractual route and a strict and powerful copyright route. This Article will refer to the separation of those routes as the “contract-copyright divide.” Parts III–V of this Article will explore the attempts of copyright owners to undermine this division and to customize copyright by imposing restrictions that are both non-standardized (i.e., flexible) and powerful, and the legal attempts to effectively curb those efforts.

However, before this Article turns to the fights over the contract-copyright divide, it is worthwhile to explain why there is any value in keeping those two routes separated. More specifically, this Section provides possible explanations as to why it is undesirable to allow copyright owners to create idiosyncratic use-restrictions and back them up with the strong enforcement mechanisms that copyright law provides.

The first possible justification is the formalistic one. Parties arguably should not be allowed to undermine the contract-copyright divide because

117. Id. at 930.
118. See id. at 941 (holding a peer-to-peer platform liable for millions of unauthorized downloads it facilitated).
119. See supra text accompanying note 95; see also Grokster, 545 U.S. at 929–30 (“When a widely shared service or product is used to commit infringement . . . the only practical [recourse is] to go against the distributor of the copying device for secondary liability . . . .”).
120. This policy discussion in the context of copyright law can be perceived as a part of a broader debate concerning the standardization of property law. The principle of numerus clausus in civil law countries and its equivalent in the common law dictate “that property rights must conform to certain standardized forms.” Merrill & Smith, supra note 18, at 4. See generally Christina Mulligan, A Numerus Clausus Principle for Intellectual Property, 80 TENN. L. REV. 235 (2013) (exploring certain implications of these doctrines in intellectual property law). There are, nevertheless, contexts in which the law prescribes arrangements that are partly flexible and partly backed-up by strong enforcement mechanism. See Thomas W. Merrill & Henry E. Smith, The Property/Contract Interface, 101 COLUM. L. REV. 773, 809–40 (2001) (exploring such legal schemes). Nevertheless, the customization attempts that this Article described stand out because they aim to create legal norms and are completely flexible, and yet fully enforceable against the world.
those legal institutions were set forth by a public fiat, and they existed in their current form, and in harmony, for centuries. While I suspect that such an explanation might be the driving force behind some judicial opinions, I find it unsatisfactory. It brings to mind Oliver Wendell Holmes Jr.’s famous words: “It is revolting to have no better reason for a rule of law than that so it was laid down in the time of Henry IV.” 121 The formalistic approach rules out legal innovations (at least if a change is not initiated by a statute) and thus undermines one of the main ways in which the law can be developed and improved. Moreover, as we shall see in the next Part, those who try to create idiosyncratic and strong restrictions employ known legal mechanisms to do so. Therefore, the formalistic response cannot well explain why those attempts should be frustrated.

A related but more sophisticated possible justification would rely on the delicate balance that copyright law arguably creates. The delicate balance narrative, which traces back many decades, perceives copyright law as a system that balances the competing interests of existing creators and distributors, who might seek stronger market power, and emerging and future creators as well as consumers, who would like easier access to works. 122 One may argue that the division between a contractual cause of action and copyright is part of that balance. Therefore, the argument goes, when the copyright owners try to create flexible and strong use restrictions, they violate an aspect of the balance that the law tries to achieve.

This justification is rooted in core copyright policy and the goals it tries to promote, 123 but, like the formalistic approach, when taken to its logical extreme, it appears tautologic. It seems to assume that keeping the contractual route separate from the copyright route is part of the delicate balance that the law tries to achieve, but is it necessarily the case? In other words, how can we be certain that when copyright owners use the power that the law provides (at least as interpreted by some courts) to undermine this divide, they also inherently destabilize the delicate balance that the law was trying to achieve?

A possible third justification, and a related one, focuses on a different balance: the one between Congress and courts. 124 The argument is that the

122. *See, e.g.*, Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984) (“Congress’[s] . . . task involves a difficult balance between the interests of authors . . . in the control and exploitation of their writings and discoveries on the one hand, and society’s competing interest in the free flow of ideas, information, and commerce on the other hand . . . .”); Cary v. Longman (1801) 102 Eng. Rep. 138, 140 (KB) (explaining that the law should balance between the need to give authors proper compensation but also guarantee public access to the work).
123. That goal relates to arguably the main task of IP policy: maintaining the “incentive-access tradeoff.” *See* Kaminski & Rub, supra note 6, at 1169.
124. *See, e.g.*, Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 166 (1975) (Blackmun, J., concurring).
balance of power between copyright owners and users should be dictated by Congress. There is some logic in this argument. Copyright law is a system that regulates market interactions, and historically the statute was tweaked to account for changes in the markets and in technology. The Supreme Court repeatedly stated that “as new developments have occurred in this country, it has been the Congress that has fashioned the new rules that new technology made necessary.” There seems to be clear tension between this description of copyright law and the attempt of software companies to customize the law to their needs, arguably because those needs differ from those of other creative industries.

This argument, nevertheless, is also not without doubts. Obviously, Congress knew and expected that the legal norms it set forth would change over time, often by courts. In fact, the current Copyright Act, enacted in 1976, uses more open-ended standards so that courts would be able to adjust it in the face of new technologies. As we shall see in the next Part, the law concerning use-restrictions also changed over time, mostly at the request of the software industry. Therefore, this justification offers only crude tools to distinguish between non-legislative changes that are legitimate and those that are not.

A fourth and final possible justification, and a compelling one, for keeping the copyright route separated from the property route emphasizes information costs. It is based on a theory that is attributed to Professors Thomas Merrill and Henry Smith’s classic work. Merrill and Smith argue that because property law creates an in-rem duty, non-standardized rights, such as the flexible rights that can be created by contracts, might significantly increase transaction costs. They explain that non-standardized rights create information costs that are only partly internalized by the parties and should therefore be subject to scrutiny. For example, the existence of idiosyncratic rights causes third parties to spend resources verifying whether items that are available in the marketplace are subject to similar in-rem rights. With this externality, the non-standardized rights might be privately desirable but

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125. See, e.g., Sony, 464 U.S. at 430 (“From its beginning, the law of copyright has developed in response to significant changes in technology.”).
126. Id. at 430–31.
127. See, e.g., Gomulkiwicz, supra note 25, at 430–32.
128. See Nimmer on Copyright, supra note 50, at § 12A.16(b) (stating that technology neutrality is a “unifying theme” of the 1976 Act).
129. Merrill & Smith, supra note 18, at 26–27.
130. Id.
131. Id. at 28–34.
socially wasteful. Therefore, the law should and does restrict the flexibility of in rem property rights.\footnote{Id. at 9–24. In a previous work, I explored a similar information costs concern in connection with certain copyright law policies. Rub, supra note 25, at 791, 814–15 (explaining the role of the first sale doctrine in lowering information costs).}

Indeed, there are sound justifications, rooted in formalism, statutory design, separation of powers, and information costs to prohibiting copyright owners from restricting their users in ways that are both non-standardized, like those that contracts allow, and that are backed up by strong enforcement mechanisms, like in rem property rights. The challenge of maintaining them separate will be the topic of the following Parts of this work.

III. COPYRIGHT LICENSES AND THE ASSAULT ON COPYRIGHT STANDARDIZATION

The previous Part explained that copyright owners can use contracts to impose flexible and weak use restrictions and/or rely on the standardized yet powerful legal norms that copyright law offers. But copyright owners should not be allowed to create non-standardized and strongly enforced use restrictions. The law in general, and courts in particular, are thus tasked with guarding the contract-copyright divide.

Copyright licenses are the main tool that copyright owners employ to undermine the contract-copyright divide. Copyright license agreements are, on the one hand, contracts, often standard form agreements. As such, like any other contract, they can include flexible use restrictions. However, when a breach of the license triggers liability under copyright law, the restriction might be backed up by the strong enforcement mechanism that copyright law provides, which causes the contract-copyright divide to collapse.

This Part presents the struggle to restrain those attempts. Section A considers how might a breach of a license allow the licensor to sue its licensees for copyright infringement. Section B zooms in on licenses over software and other digital goods, which present a unique and exceptionally challenging problem, and the leading approach, which this Article calls the Vernor-MDY framework, to police such licenses. The next Part will explain why that approach was bound to fail and, indeed, failed.

A. BREACH OF A LICENSE AGREEMENT AS A TRIGGER FOR COPYRIGHT LIABILITY

As a general matter, and as further explained below, licenses do not give copyright owners the power to create any idiosyncratic use restriction they desire and back it up with the strong enforcement mechanisms of copyright law. This Section explains when, nevertheless, a breach of a license agreement triggers liability under copyright law.
An example will illustrate what copyright owners can and cannot achieve with licenses. Assume that an author of a book enters an agreement with a publisher. The core of the agreement is a license in which the author authorizes the publisher to print multiple copies of the book. However, like any other contract, this agreement can set forth almost any additional terms and conditions that the parties choose. While every such agreement is likely to include a promise to pay royalties, the parties can include more idiosyncratic promises. For example, the publisher can promise to print the author’s political statement on the book cover, or to distribute every book with a red book sleeve, or to wear a red shirt to work on Thursdays.

Non-standardized promises are typically enforceable as a matter of contract law, but they can arguably also trigger liability under copyright law. Assume that the contract conditions the license on the performance of the publisher’s promises. In other words, assume that the contract states that the license will expire as soon as the publisher breaches any of those promises. In that case, if the publisher breaches a promise (e.g., wears a green shirt to work on a Thursday), the license will no longer be in effect. Following that, any reproduction of the book, for example, by printing another copy, will likely be considered copyright infringement.

Nevertheless, a closer look reveals that the author-publisher contract does not violate the contract-copyright divide. While such contracts will be analyzed in greater detail in Part V, for now, it is enough to note that what is triggering the liability under copyright law is not actually the breach of the contract but the reproduction of the work that followed that breach. In other words, if the publisher breaches the license agreement but never prints another book, its liability will be limited to a breach of contract claim.

Moreover, authors will find it quite difficult to effectively use copyright licenses to create flexible and strong limitations on buyers of their books. For example, authors cannot make sure that buyers will read political statements on their books’ cover, keep a red book sleeve on, or wear specific clothes when reading them. Even if the book is distributed with a shrink-wrap agreement—an agreement that is considered accepted by opening a product—that requires buyers to promise to do any of those things, the scheme will fail. As more fully explained in Part V, even if buyers breach the contract, and even if any copyright license then expires, most buyers do not need a license because their normal use simply does not trigger copyright liability with or without a license. Moreover, this scheme will not allow the copyright owner to sue third parties who did not accept the agreement.

AGAINST COPYRIGHT CUSTOMIZATION

B. LICENSES OVER SOFTWARE AND DIGITAL GOODS: VERNOR-MDY FRAMEWORK

The previous Section explored why a breach of license agreements often does not trigger liability under copyright law. But, as further explained below, the analysis is dramatically different when it comes to software and digital goods. The first subsection below explains why copyright law might allow licensors (i.e., copyright owners) of digital goods to exercise full control over their consumers’ use, how Congress tried to restrict that power by reforming the Copyright Act in 1980, and how the Ninth Circuit, especially in its September 2010 decision in Vernor v. Autodesk, Inc.,134 gutted Congress’ intent. The next subsection presents the Ninth Circuit’s attempt to create its own restriction against the licensors’ excessive power, especially in its December 2010 decision in MDY v. Blizzard.135 The next Part will show that this framework failed.

1. The RAM Copy Problem and Vernor v. Autodesk

Software and digital goods operate in a unique way that affects the role that licenses play in this area. Copyright licenses typically do not undermine the contract-copyright divide when it comes to non-digital goods, like books and CDs, because consumers can use the goods without taking actions that copyright law set as one of the copyright owner’s exclusive rights. But the case is quite different when it comes to software and any other digital goods, such as e-books, digital images, and websites.

When users use digital goods—e.g., run a computer program, read an e-book, listen to streamed music, surf to a webpage, and so on—copies of those goods are automatically created and stored in the computer’s random access memory (“RAM”).136 This temporary copy is incidental to the work of the computer, and it is automatically deleted once it is no longer needed, sometimes within milliseconds.137 Nevertheless, in a series of decisions stretching back to its famous 1993 holding in MAI Systems Corp. v. Peak Computer, Inc., the Ninth Circuit held that temporary RAM copies meet the statutory definition of a “copy” under the Copyright Act.138 Many other

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134. Vernor v. Autodesk, Inc., 621 F.3d 1102, 1114–16 (9th Cir. 2010).
135. MDY Indus., LLC v. Blizzard Ent., Inc., 629 F.3d 928, 935 (9th Cir. 2010).
137. MAI Sys. Corp. v. Peak Comput., Inc., 991 F.2d 511, 519 (9th Cir. 1993).
138. Id.; see also Beckman Instruments, Inc. v. Gincom Sys., Inc., Nos. 99-55111 & 99-55455-2000 WL 1022224, at *2 (9th Cir. July 25, 2000) (finding that the defendant “made copies of the software when it ‘opened’ and ‘closed’ the plaintiff’s software); Triad Sys. Corp. v. Se. Express Co., 64 F.3d 1330, 1335 (9th Cir. 1995) (finding that the defendant made copies of a software
courts,\textsuperscript{139} as well as the Copyright Office,\textsuperscript{140} agree. This is consequential because the Copyright Act provides that the copyright owner has an exclusive right "to reproduce the copyrighted work in copies."\textsuperscript{141}

The conclusion is that, with sharp contrast to physical goods, any operation of any software or digital media, unless it falls under one of the statutory defenses, requires a license. Therefore, extending copyright to software and digital goods carries the risk that in this medium, unlike any other, copyright prohibition on reproduction will de facto mean a prohibition on all use.

In 1980, Congress tried to curb that expansion by enacting the essential step defense. That defense, codified in Section 117(a) of the Copyright Act, was enacted at the recommendation of the Commission on New Technological Uses of Copyrighted Works ("CONTU").\textsuperscript{142} It provides that "it is not an infringement for the owner of a copy of a computer program to make or authorize the making of another copy" if such a copy "is created as an essential step in the utilization of the computer program."\textsuperscript{143}

The essential step defense, therefore, has the potential to constrain the excessive power that software licensors have over their licensees (i.e., users). With this defense in place, a breach of a software license will typically not lead to liability for copyright infringement. Even if users breach a license agreement, and even if the license terminates because of the breach, as far as copyright law is concerned, users are free to continue to use the product when their actions fall under the essential step defense.

by using it). Interestingly, recently, while discussing a claim concerning copyright preemption, a Ninth Circuit panel noted that some RAM copies might not persist in the computer’s memory for long enough period to be considered copies, as the term is used in the Copyright Act, and that other such copies might be considered fair use. CDK Glob. LLC v. Brnovich, No. 20-16,169, 2021 WL 4944824, at *5-6 (9th Cir. Oct. 25, 2021). This decision—which seems to be in tension with a long line of cases—might have major implications on the scope of copyright protection of software, but, at the time of writing, it is too early to fully appreciate whether the Ninth Circuit will follow its holding in CDK Global.

\textsuperscript{139}. See, e.g., Levey v. Brownstone Inv. Grp., LLC, 590 F. App'x 132, 136 (3d Cir. 2014); Soc'y of Holy Transfiguration Monastery, Inc. v. Gregory, 689 F.3d 29, 55 (1st Cir. 2012); Stenograph L.L.C. v. Bossard Assoc., 144 F.3d 96, 101-02 (D.C. Cir. 1998). But see Cartoon Network, 536 F.3d at 127–29 (holding that creating a temporary copy is not copyright infringement if that copy is quickly deleted). It should be noted that recently a Ninth Circuit panel held that the Second Circuit’s decision in Cartoon Network was correct. CDK Glob., 2021 WL 4944824 at *5. However, it remains to be seen if other panels within the Circuit will follow that holding.

\textsuperscript{140}. U.S. COPYRIGHT OFF., DMCA SECTION 104 REPORT 112 (2001).


\textsuperscript{143}. 17 U.S.C. § 117(a).
The essential step defense, however, presumably has a vulnerability that software companies aggressively exploit. The defense is only available to “owner[s] of a copy of a computer program.” In that respect, the essential step mirrors another important (and highly litigated) defense—the first sale doctrine—which allows “the owner of a particular copy . . . to sell or otherwise dispose of the possession of that copy.”

Software companies argue that their users are not the owners of the copies of the software but mere licensees. The absurdity of this claim will be discussed in the next Part. That weakness aside, unfortunately, courts in general—and the Ninth Circuit, which handles more software cases than any other appellate court, in particular—are willing to accept that some software users are mere licensees and not owners. But those courts struggled to come up with a test to determine which users are owners and which are mere licensees.

In August 2010, in Vernor v. Autodesk, Inc., the Ninth Circuit finally came out with a decisive test for identifying mere-licensee (i.e., non-owner) users. Timothy Vernor purchased authentic CD-ROMs of a software created by Autodesk in a garage and office sales and offered them for sale on eBay. After eBay suspended his account for allegedly infringing Autodesk’s copyright, he brought a declaratory action against Autodesk arguing that his actions were protected by the first sale doctrine. Autodesk claimed in response that it did not sell the software but only licensed it, and therefore Vernor was at most a licensee who was not an owner entitled to the protection of the first sale doctrine. The Ninth Circuit agreed with Autodesk and adopted a conclusive test to separate owners from licensees: “[A] software user is a licensee rather than an owner of a copy where the copyright owner (1) specifies that the user is granted a license; (2) significantly restricts the user’s ability to transfer the software; and (3) imposes notable use restrictions.”

The decision, its weak foundation, and its problematic impact will be analyzed in greater depth in the next Part. However, it is not too early to note that the three Vernor factors require courts to look at just the four corners of the license agreement to determine the status of the transaction. Therefore, merely by including certain terms in the license agreement—typically a standard form agreement drafted by the software company that users accept without reading—the users lose their rights under the essential step defense and the first sale doctrine. As the next subsection will...
demonstrate, this gives the software companies—who draft those standard form agreements—tremendous power over their consumers.

2. MDY v. Blizzard and the Nexus Test

MDY v. Blizzard, decided by the Ninth Circuit in December 2010, demonstrates how software companies try to impose flexible non-standardized restrictions on their users that are backed up by the powerful enforcement mechanisms that copyright law provides. As the case plays a major role in this area of the law and in the remaining Parts of this Article, it is worthwhile to explore it in depth.

Blizzard created World of Warcraft (“WoW”). The game, released in 2004, was, for many years, the most popular Massively Multiplayer Online Role-Playing Game (“MMORPG”) in the world, with over a hundred million registered accounts by 2014. By 2016, the game had grossed over $9.23 billion in revenue, making it one of the highest-grossing video game franchises of all time.

Players of WoW control characters, explore landscapes, fight monsters, complete quests, and interact with other players and non-player characters. As characters become more developed, they gain various assets, talents, and skills. However, reaching those milestones requires many hours of gameplay.

This is where MDY came into the picture. Michael Donnelly, the founder of MDY, created a software bot, called Glider, to play WoW for its users by repeating a series of simplified, yet time consuming, actions. That way, Glider users were able to advance their WoW characters unattended. Glider

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154. MDY Indus., LLC v. Blizzard Ent., Inc., 629 F.3d 928, 935 (9th Cir. 2010).


156. A software bot is a program designed to automate tasks. Typically, these tasks are simple, repetitive, and routine. So, a software bot can perform them quicker and more efficiently than a human could. What Are Software Bots?, THINKAUTOMATION, https://www.thinkautomation.com/bots-and-ai/what-are-software-bots [https://perma.cc/NFX5-DTKS].

157. MDY, 629 F.3d at 935.
was launched in 2005 and became a massive success.\textsuperscript{158} By 2008, MDY sold about 120,000 copies of Glider, generating about $3.5 million in profits.\textsuperscript{159} To this day, Glider is considered the most commercially successful bot in history.\textsuperscript{160}

Blizzard perceived Glider as a threat. The software giant was concerned that if the use of bots became prevalent, users would spend less time on its platform and would be deterred from playing the game. In particular, Blizzard was concerned that Glider would dilute the value of the achievements that players gain through hours of play, and thus harm the appeal of the game and its brand.\textsuperscript{161}

Blizzard needed to stop its users from using bots. In other words, it needed to impose a use restriction. The restriction had to be non-standardized. After all, there is no pre-existing property right, including under copyright law, that prohibits users from being assisted by bots. But Blizzard also needed the use restriction to be strong enough to be respected by third parties, and in particular MDY.

Blizzard turned to copyright licenses. It included a provision in its EULA in which the user promised “not to . . . create or use . . . bots . . . designed to modify the World of Warcraft experience.”\textsuperscript{162} The EULA also provided that the user has a license to play the game and create temporary copies while doing it.\textsuperscript{163} Finally, the EULA allegedly conditioned the license on the users keeping their promises, including the antibot provision.\textsuperscript{164}

Blizzard’s legal argument against MDY proceeded in several stages. First, it argued that by using Glider, the users breached the EULA. Second, because the license was conditioned on the contractual promises, Blizzard argued that as soon as users employ Glider, their licenses automatically terminated. Third, when users continued to play the game, their computers created temporary copies of the copyright-protected software in the computers’ RAM.\textsuperscript{165}

Fourth, Blizzard argued that the creation of those temporary copies violated its exclusive right of reproduction. To make that claim, Blizzard had
to overcome the essential step defense. But Vernor provided an easy way to do so. Blizzard’s EULA “reserve[d] title in the software and grants players a non-exclusive, limited license[;] . . . impose[d] transfer restrictions[,] . . . [and] impose[d] a variety of use restrictions.”166 Thus, under Vernor, the users did not own the software, and therefore the essential step defense did not apply.

The fifth and final step in Blizzard’s argument took advantage of the nature of copyright as a property right. It argued that since the users of Glider are copyright infringers, and since MDY knowingly assisted them to commit that infringement, MDY is liable for contributory copyright infringement and should be enjoined.167

Blizzard’s legal construction, while rooted in the Ninth Circuit caselaw, seems to have created what the law should not allow: the creation of a non-standard flexible use restriction that is backed up by the strong enforcement mechanisms—including against third parties—that are part of copyright law. Even worse: this legal argument was not limited to Blizzard. Any software company, as well as any distributor of digital goods, can use the exact same argument to gain full control over its consumers’ use. The argument was so sweeping and troubling that even the Ninth Circuit panel, the same one who decided Vernor, noticed the issue. It explained the possible results of a Blizzard win:

Blizzard—or any software copyright holder—could designate any disfavored conduct during software use as copyright infringement, by purporting to condition the license on the player’s abstention from the disfavored conduct. . . . This would allow software copyright owners far greater rights than Congress has generally conferred on copyright owners.168

The solution that the Ninth Circuit chose was to create a new doctrine, one that has no basis in the language of the Copyright Act—the nexus test (or the nexus requirement). The Ninth Circuit explained that as long as the provision of the license agreement that was breached was a mere covenant, the plaintiff will be entitled to sue only for a breach of contract.169 However, if the breached provision is a condition for the license, the licensor will be able to sue for copyright infringement.170 The nexus requirement is one that the breached contractual provision must meet to be considered a condition. The Ninth Circuit described it:
[F]or a licensee’s violation of a contract to constitute copyright infringement, there must be a nexus between the condition and the licensor’s exclusive rights of copyright.171

In this case, the Ninth Circuit found that since the prohibition on using bots did not involve “alter[ing] or copy[ing] WoW software,” the nexus requirement was not met, and thus the users did not infringe Blizzard’s copyright, and MDY cannot be liable as a secondary infringer for assisting them.172 In other words, in this case, the Ninth Circuit ruled that the prohibition on using bots was a covenant, whose breach did not lead to copyright infringement. As such, it is just another flexible and weak use restriction that can only be enforced under contract law.

Indeed, looking at Vernor and MDY together—two cases that were argued on the same day before the same panel—it seems that the Ninth Circuit was trying to create a balance between the rights of software companies and their users. Vernor gave those companies tremendous power by allowing them to frame any transaction with a user a mere license, while MDY tries to limit the implications of that classification and provide some restrictions to the power of software companies as licensors. The next Part shows that the framework, nevertheless, failed.

IV. THE FAILURE OF THE VERNOR-MDY FRAMEWORK

The Ninth Circuit handles more copyright law and software law-related cases than any other appellate court.173 Its framework for handling software licenses is thus highly influential on other courts, and on the industry as a whole.174 That framework was largely shaped by the two 2010 decisions that were just explored: Vernor, which gave software companies tremendous power by allowing them to easily contract around the essential step defense, and MDY, which tried to limit that power by creating the nexus test.

This Part explains that this framework was bound to fail and that it indeed failed. It is rooted in poorly reasoned opinions, in an erroneous application of copyright law and commercial law, and in inadvisable copyright policy. The

171. Id. at 941 (emphasis added).
172. Id.
years since those decisions were published provide even stronger evidence for their shortcomings.

The Part starts with the weakness of those two opinions from both doctrinal and normative perspectives. Section A explores the inherent flaws in *Vernor v. Autodesk, Inc.*, where the court overlooked basic principles of commercial law in a way that provided software companies with excessive power that undermines both Congress’ intent and sound copyright policy. Section B explores some of the failures in *MDY* and, in particular, its weak normative guidance, which does not arm courts with the power to effectively fix the damage that was done in *Vernor*.

The rest of this Part provides several additional reasons why the time has come to reverse *Vernor* and *MDY* and abandon their flawed approach. Section C explores how courts tried—and failed—to apply this framework in the last decade. It reports on a study of the 46 cases that use the nexus test and indicates how chaotic the caselaw is and how it does not succeed in establishing any clear rules as to when a breach of a license agreement triggers copyright liability.

The *Vernor-MDY* framework is also being challenged by several newer decisions. Section D claims that the framework is in clear tension with recent Supreme Court decisions. Finally, Section E shows that there is currently a clear circuit split regarding certain aspects of copyright licenses. Specifically, recent Second Circuit caselaw rejects, clearer than ever before, elements within the Ninth Circuit’s framework.

A. *THE FALLACIES OF VERNOR V. AUTODESK*

In *Vernor*, the Ninth Circuit held that “a software user is a licensee rather than an owner of a copy where the copyright owner (1) specifies that the user is granted a license; (2) significantly restricts the user’s ability to transfer the software; and (3) imposes notable use restrictions.” 175 This holding incorporates two legal conclusions: first, that software users might be licensees of a copy of the software, and second, that this status can be created contractually. Both conclusions are wrong as a matter of law and harmful as a matter of policy.

1. What Can and Cannot be Licensed

For decades, software companies have argued that they do not sell software to their customers, but just license it. 176 That argument is preposterous, and it is absurd that most courts, including the Ninth Circuit,
are willing to accept it. A landowner can grant a license—one of the recognized forms on nonpossessory interests in land—which authorizes the licensee to temporarily enter the landlord’s land without being considered a trespasser.\textsuperscript{177} For example, most concert and sports stadium attendees are considered licensees.\textsuperscript{178} Owners of intellectual property rights can also grant licenses, which allows licensees to take actions that are the copyright owners’ exclusive rights without being considered infringers. Specifically, a copyright licensor can authorize its licensees to reproduce, adapt, distribute, publicly display, and/or publicly perform the work.\textsuperscript{179} The Copyright Act, for example, uses the term “license” more than 700 times,\textsuperscript{180} and all of those references mean that exactly: an authorization to take one or more of the exclusive rights. Software companies are typically copyright owners, and as such, they can certainly license their exclusive rights.

However, the rights in the intellectual property are distinguished from the rights in the tangible medium in which it is embodied. The Copyright Act makes that distinction clear.\textsuperscript{181} This distinction is important partly because copyright law does not govern transactions in tangible goods. Those are governed by state commercial law.\textsuperscript{182}

The essential step defense is an important example of copyright law’s reliance on state personal property law. Under the Copyright Act, this defense

\textsuperscript{177} Doré v. Wormley, 690 F. Supp. 2d 176, 184 (S.D.N.Y. 2010); RESTATEMENT (FIRST) OF PROP. § 512 (AM. L. INST. 1944); JOSEPH WILLIAM SINGER, INTRODUCTION TO PROPERTY 180 (2d ed. 2005).


\textsuperscript{179} Michael J. Madison, Reconstructing the Software License, 35 LOY. U. CHI. L.J. 275, 276 (2003) (“Licenses define the circumstances under which those who work with copyrighted material can do so without fear of suit.”).

\textsuperscript{180} See, e.g., 17 U.S.C. § 101 (2018) (defining “transfer of copyright ownership” to include “exclusive license . . . but not including a nonexclusive license”); id. § 115 (dealing with “[c]ompulsory license for making and distributing phonorecords”); id. § 203 (dealing with the right of authors to terminate “transfer or license of copyright”); id. § 205(e) (dealing with the “[p]riority of “nonexclusive license . . . over a conflicting transfer of copyright ownership”).

\textsuperscript{181} Id. § 202 (“Ownership of a copyright . . . is distinct from ownership of any material object in which the work is embodied.”); see Perzanowski & Schultz, supra note 13, at 1222–23; Madison, supra note 179, at 297.

\textsuperscript{182} See NIMMER ON COPYRIGHT, supra note 50, at § 8.08[B][1] (stating that copy ownership “arises presumably under state law”). This reliance on state law is not unique within copyright law, or federal IP law. Federal IP law uses but does not define multiple terms of art of state commercial law, such as “license,” “sale,” “mortgage,” “assignment,” and more. See Ariel Katz, Aaron Perzanowski & Guy A. Rub, Essay, The Interaction of Exhaustion and the General Law: A Reply to Duffy and Hynes, 102 VA. L. REV. ONLINE 8, 21 (2016) (“Federal IP laws rely on state law definitions of those terms. This symbioses between federal IP law and general commercial law cuts across many IP doctrines.” (footnote omitted)); see also David Nimmer, Elliot Brown & Gary N. Frischling, The Metamorphosis of Contract into Expand, 87 CALIF. L. REV. 17, 24–29 (1999) (discussing the role of state contract law within federal copyright law).
is available to “the owner of a copy of a computer program.” Therefore, as long as the copyright owner still owns the tangible object in which the software is embodied (e.g., the CD), the defense is inapplicable. However, as soon as ownership passes, the new owner is allowed, per the essential step defense, to create temporary copies of the program. But the Copyright Act does not specify who is the “owner” of the tangible copy. Ownership of chattel is a matter of state personal property law.

Like any property right, interests in personal property are not fully customizable, a principle that is often called *numerus clausus*. Personal property law recognizes only certain transactions in chattel and not others. The Copyright Act, for example, explicitly mentions only “sale or other transfer of ownership, or by rental, lease, or lending” as types of transactions in tangible copies. Personal property law recognizes a few additional types of transactions, such as gifts and bailments. However, licensing a tangible good is something that simply does not exist under personal property law.

Courts routinely reclassify transactions according to their true nature. For example, when dealing with the distinction between a lease and a sale with a security interest—a commonly litigated issue of commercial law—courts and commentators focus on the true nature of the reversionary interest and not on the parties’ classifications. Even if the parties call the transaction a lease, if the transferor of possession is not expected to regain possession while the goods still have value, courts, pursuant to the Uniform Commercial Code, classify the transaction as a sale and not a lease. Similarly, if the contract over a transfer of chattel calls the transaction something that does not exist, such as a license of a tangible good, courts will need to correctly classify it. Under similar logic, when a company transfers permanent possession over a tangible good without ever expecting to regain

184. See Madison, supra note 179, at 290.
185. Merrill & Smith, supra note 18, at 17–19 (noting the restrictive nature of personal property law).
186. 17 U.S.C. § 106(3); see also Perzanowski & Schultz, supra note 13, at 1252 (describing the statutory basis for reading the Copyright Act).
187. Madison, supra note 179, at 300 (“Only the work of authorship may be licensed. The tangible work gets sold, rented, or leased, and then returned.”); see also Robinson, supra note 25, at 1435–37 (illustrating the rarity of common law servitudes for personal property).
188. Stephen L. Sepinuck, When is a Bailment Really a Sale, 9 TRANSACTIONAL LAW., Oct. 2011, at 1 (“Contracting parties often structure a transaction in one way, knowing that there is a risk that the law might re-characterize it as something else entirely.”).
possession, the transaction should be classified as a sale. In a sale of goods, title passes to the buyer no later than when it takes possession.

Indeed, calling a permanent transfer of possession for a lump-sum payment a “license” of the physical object is inconsistent with how the Copyright Act treats licenses and with how personal property law, including the Uniform Commercial Code, handles transactions in chattel.

2. Vernor’s Policy Calamity

In Vernor, the Ninth Circuit took an existing fallacy—where courts fail to distinguish between the intellectual property rights, which can be licensed, and the tangible objects in which they are embodied, which cannot—and made it significantly worse. In doing so, it opened the door to exceptionally bad public policy and abuse of our legal system.

Indeed, while most courts erroneously agree that a chattel in which software is embodied could be licensed, they vary in the approaches they employ to separate licenses from sales. For a few decades, the Ninth Circuit struggled to classify transactions over copies of software and to separate users that are owners from those who are mere licensees. Yet, in 2010, in Vernor v. Autodesk, Inc., the Ninth Circuit put those doubts to rest by adopting the software companies’ fiction in full.

The problem with the Vernor test goes beyond the inconsistencies with the Copyright Act and personal property law. Its distortion of the law leads to a distortion of the related public policy. As I have noted elsewhere, “[t]he most crucial aspect in this test and the way in which the Vernor court applied it, is that it focuses exclusively on the four corners of the contract—a standard-

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191. Madison, supra note 179, at 306–07; see also Fairfield, supra note 25, at 54 (criticizing “the fiction that the buyer of software is not really the owner but merely the licensee of the software”).

192. U.C.C. § 2-401(1) (A M. L. INST. & UNIF. L. COMM’N 2011). It should be noted that the U.C.C. allows sellers to keep security interests in sold items to guarantee the buyers’ obligations. This is certainly possible in the case of software as well. However, as users of software often make a one-time lump-sum payment, the value of the security interest is limited. Obviously, even if the security interest exists, it does not prevent the buyer from being the title owner, who, as such, is entitled to the statutory defenses under copyright law.

193. See Nimmer on Copyright, supra note 50, at § 8.12[B][1][d] (“The first sale inquiry examines ownership of the tangible property in which the copyrighted work has been embodied, not ownership of the copyright itself. Yet not all courts focus their attention on the proper point.”). Unfortunately, even the Supreme Court once acknowledged this possibility, although in passing in a case that did not involve licensing. Quality King Distribs., Inc. v. L’anza Rsch. Int’l, Inc., 523 U.S. 135, 146–47 (1998) (“[T]he first sale doctrine would not provide a defense . . . against any nonowner such as a bailee, a licensee, a consignee, or one whose possession of the copy was unlawful.” (emphasis added)).

194. See Carver, supra note 136, at 1898–925 (exploring five different approaches that courts adopt to decide this question).

195. Vernor v. Autodesk, Inc., 621 F.3d 1102, 1111 (9th Cir. 2010).
form agreement drafted by the seller." 196 This fiction is what gives software companies a powerful weapon against their users.

The legal fiction that software companies use—that they do not sell the software but license it—is motivated purely by a desire to defeat the balancing mechanisms that are part of copyright law’s bargain. 197 While one may arguably claim that software is unique and, therefore, courts might need to apply core principles of copyright law differently when computer programs are concerned, 198 this argument certainly cannot stand when it comes to the essential step defense. That defense was enacted specifically to deal with copyright in software, and it explicitly applies only to computer programs. 199 Allowing its easy defeat by software companies is not just legally wrong, but it makes the essential step defense a dead letter and unequivocally circumvents Congress’ clear intent.

Unfortunately, in Vernor, the Ninth Circuit gave the software companies an easy blueprint to launch an unstoppable deadly attack on their users’ rights, as protected by the essential step defense. With this weapon in hand, all that software companies need to do is to use a few magic words in their standard form agreements, which users rarely read and never negotiate, 200 and voila: the users lose their rights under the essential step defense, and the company gains full permanent control over the use of the software. This invites software companies to customize copyright law by creating non-standardized flexible use restrictions that are backed up by the powerful enforcement tools of copyright law.

Blizzard did exactly what the Ninth Circuit, especially in Vernor, invited software companies to do. In MDY, the Ninth Circuit tried to fix the damage that it had done just three months earlier in Vernor and to invent, out of thin air, the nexus test. The next Sections will show that this attempt failed.

B. MDY V. BLIZZARD’S PROBLEMATIC NEXUS TEST

This Section makes a simple yet powerful argument: The aftermath of the Ninth Circuit decision in MDY—including, as explored in the next Section, dozens of conflicting opinions—was predictable. The seeds of legal chaos were sown in the opinion itself. The nexus test could never have fixed the damage that the same panel of the Ninth Circuit inflicted three months earlier in Vernor.

196. Rub, supra note 25, at 814.
197. Madison, supra note 179, at 281–82.
198. This approach, which can be referred to as software exceptionalism, is highly controversial. See, e.g., Carver, supra note 156, at 1929; Perzanowski & Schultz, supra note 13, at 1227–31.
199. 17 U.S.C. § 117(a) (2018) (noting that the defense applied to the actions of “the owner of a copy of a computer program” (emphasis added)).
This Section discusses two main failures. First, and more importantly, the opinion fabricated, out of thin air, a test that, on its face, is quite meaningless, and it provided almost no guidance as to how to apply it. Second, while the Ninth Circuit’s attempt to restrict the power of software companies makes sense from a copyright law perspective, it did it by misapplying notions that are part of contract law, which likely exacerbated the difficulties in interpreting and applying the nexus test.

1. The Nexus Test’s Lack of Normative Teeth

At its heart, the Ninth Circuit’s nexus text requires parties to assess the connection between two completely different legal concepts—a contractual promise and a property right—without providing any tool or any guidance as to how to conduct that comparison. Indeed, under MDY, a licensor can sue the licensee for copyright infringement if there is a nexus between the contractual provision that the licensee breached on the one hand and the licensor’s exclusive rights under copyright law on the other. The problem is that there is no basis to compare those oranges and apples. To paraphrase Justice Scalia (in a different context), it is like judging the nexus between the length of a particular line and the weight of a particular rock.²⁰¹ By itself, it is simply meaningless. The Ninth Circuit, unfortunately, made no attempt to clarify the content of the test, how it is to be applied, or what factors should be considered when evaluating the nexus between the contract and copyright.²⁰²

The opinion itself exemplified its normative weakness. In the license agreement in question in MDY, the user promised not to “create or use . . . bots.”²⁰³ The Ninth Circuit held that this use does not “implicate[] one of the licensor’s exclusive statutory rights.”²⁰⁴ It continued that “Glider does not infringe any of Blizzard’s exclusive rights . . . [because] the use does not alter or copy WoW software,”²⁰⁵ and, therefore, there was no nexus between the prohibition on using the bot of the exclusive right. But Blizzard didn’t argue that Glider was infringing, but that the users, with MDY’s help, were. And the users did, in fact, create temporary copies that did, under Ninth Circuit

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²⁰³. MDY Indus., LLC v. Blizzard Ent., Inc., 629 F.3d 928, 938 (9th Cir. 2010).
²⁰⁴. Id. at 940.
²⁰⁵. Id. at 941.
precedent, \textsuperscript{206} “implicate” Blizzard’s exclusive right to control the reproduction of its work.

To illustrate this point, consider what would have happened if Blizzard’s EULA required the users to promise “not to play WoW while a bot is running.” Playing a video game creates temporary copies of the software in the computer RAM and, therefore, this phrasing of the antibot restriction seems to meet the Ninth Circuit’s requirement because it “implicates one of the licensor’s [i.e., Blizzard’s] exclusive statutory rights” because the users “copy WoW’s game client software.” \textsuperscript{207} The mere fact that this trivial alteration in the contractual language—a change that does not modify what the users are allowed and not allowed to do—seems odd. It is unclear and unreasonable that the Ninth Circuit nexus test relies on such simple factors.

In one context, the Ninth Circuit noticed that its rule might create difficulties going forward. It stated in a footnote:

A licensee arguably may commit copyright infringement by continuing to use the licensed work while failing to make required payments, even though a failure to make payments otherwise lacks a nexus to the licensor’s exclusive statutory rights. We view payment as \textit{sui generis}, however, because of the distinct nexus between payment and all commercial copyright licenses, not just those concerning software. \textsuperscript{208}

This additional wrinkle makes the nexus test and its justification even weaker, as it is normatively vague. \textsuperscript{209} It seems obvious that a promise to pay royalties should be considered a condition for the license under this rule. However, as Michael Kenneally explained, “[p]ayment of money is just one form of consideration one might pay for a license. Agreeing to refrain from certain behavior that the licensor finds objectionable is another.” \textsuperscript{210} In other words, if the rule is interpreted to encompass all considerations, the exception swallows the nexus requirement, and \textit{any} promise should likely be considered a condition. This, of course, makes little sense. But the other option, that “payment” means money, is hard to justify from a copyright policy perspective. The Ninth Circuit provided no justification to separate one form of consideration from another.

Indeed, the Ninth Circuit tried to create a test that compares two things that are just different by nature. Except for a promise to pay royalties, where

\begin{footnotes}
\item[206] See \textit{supra} text accompanying note 138.
\item[207] \textit{MDY}, 629 F.3d at 940, 955.
\item[208] \textit{Id.} at 941 n.4.
\item[209] This rule also seems to allow copyright owners to impose extreme use restrictions if they are disguised as a duty to pay. See \textit{Rub}, \textit{supra} note 27, at 1188 (“It is, however, quite easy to characterize most contractual obligations, especially of buyers, in terms of a duty to pay.”).
\item[210] Kenneally, \textit{supra} note 25, at 1225; see also \textit{Gomulkiewicz}, \textit{supra} note 202, at 131 (using “non-monetary consideration (such as attribution or ‘share alike’ )” as an example of possible desired consideration in a license agreement).
\end{footnotes}
it simply abandoned the nexus requirement altogether, the court provided no guidance that allows future courts and parties to give meaning to the nexus requirement. It is, therefore, not surprising that they struggle to apply it.

2. The Ninth Circuit Misapplication of Core Contract Law Principles

In MDY, like in Vernor three months earlier,²¹¹ the Ninth Circuit deviated from core principles of commercial law without explaining that departure. Specifically, the court suggested that its approach was rooted in established contract law doctrine. It was not. While the court broadly used terms of art that are part of any contract law treaties, like “covenants” and “conditions,”²¹² and while it cited the Restatement of Contracts,²¹³ it casually used these terms in a way that is quite different from how they are used under contract law. This added to the confusion among district courts, a topic this Article will explore in the next Section.

At the heart of its decision, the Ninth Circuit stated that “[w]e distinguish between conditions and covenants according to state contract law, to the extent consistent with federal copyright law and policy.”²¹⁴ The problem is that what the Ninth Circuit actually did had little to do with “state contract law,” and it departed from that law without pointing to any inconsistencies “with federal copyright law and policy.” For example, the Ninth Circuit stated that “[c]onditions precedent are disfavored because they tend to work forfeitures. Wherever possible, equity construes ambiguous contract provisions as covenants rather than conditions.”²¹⁵ This suggestion, while based on contract law principles,²¹⁶ is out of context and therefore confusing. Disfavoring conditions precedent is not an overarching principle of equity but just a default rule of contract interpretation.²¹⁷ Indeed, contract law is clear that unambiguous language can create enforceable conditions.²¹⁸ However, nothing in the language of the Ninth Circuit suggests that the nexus requirement is a default rule.

Indeed, the Ninth Circuit mixed up the principles of contract interpretation and copyright policy to create a Frankenstein rule. Contract law’s doctrine seems ill-equipped to achieve the policy goals that the Ninth Circuit was trying to secure. If the Ninth Circuit approach was really rooted in contract law

²¹¹ See supra Section IV.A.
²¹² MDY, 629 F.3d at 939–41.
²¹³ Id. at 939.
²¹⁴ Id. (emphasis added).
²¹⁵ Id. (citation omitted).
²¹⁷ Georges v. United Nations, 834 F.3d 88, 94 (2d Cir. 2016); see infra note 310 and accompanying text.
²¹⁸ RESTATEMENT (SECOND) OF CONTS. § 226 (AM. L. INST. 1981); see also supra Section IV.A (discussing the implication of the Ninth Circuit’s inconsistent treatment of contractual conditions).
principles, which typically prioritize the parties’ intent as reflected in the agreement, and if the nexus test is indeed at its core a default rule, then it could be defeated by unambiguous drafting. This, however, seems inconsistent with the spirit of the ruling and the policy that the Ninth Circuit claimed it promotes.

It seems that the Ninth Circuit came up with a rule that was rooted in the strictness of property rights and not with the flexibility of contract law. Therefore, the extensive reference to the Restatement of Contracts and state contract caselaw, as well as the use of contractual terms of art, seems misguided and confusing. The next Section will explore the confusion that indeed permeates the caselaw that followed MDY.

C. A DECADE OF CHAOTIC LITIGATION: THE FAILURE OF THE NEXUS REQUIREMENT

In MDY v. Blizzard, the Ninth Circuit introduced a new approach for deciding whether a breach of a license agreement creates a cause of action under copyright law. The previous Section explained that the opinion itself used confusing reasoning and, more importantly, provided little guidance.

But perhaps the hope was that, as the common law typically evolves, future decisions will develop clearer and more certain tests that will give more concrete meaning to the nexus requirement. Or maybe if a concrete test is unachievable, courts could at least decide those cases on a pure case-by-case basis where, to paraphrase Justice Stewart, they are able, at the bare minimum, to know that the nexus exists when they see it.

If those were the hopes, more than ten years of litigation reveal that they were false. The caselaw that followed MDY can best be described as chaotic. This Section reports on a study of the use of the MDY’s nexus test in court decisions in the years that followed the opinion’s release (2010–2021). The study found 46 decisions that cite to and rely on the Ninth Circuit opinion in

219. See Newmont Mining Corp. v. AngloGold Ashanti Ltd., No. 17-CV-8665, 2020 WL 1285543, at *17 (S.D.N.Y. Mar. 18, 2020) ("[A] written contract is to be interpreted so as to give effect to the intention of the parties as expressed in the unequivocal language they have employed." (quoting Terwilliger v. Terwilliger, 206 F.3d 240, 245 (2d Cir. 2000))); see also Bong Je Choi v. Prima Escrow, Inc., No. B288871, 2019 WL 5157124, at *8 (Cal. Ct. App. Oct. 15, 2019) (noting that indemnities in contracts are "interpreted according to the language and contents of the contract as well as the intention of the parties as indicated by the contract." (quoting Wilshire-Doheny Assocs. Ltd. v. Shapiro, 100 Cal. Rptr.2d 478, 490 (2000))). This principle demonstrates how contract law allows the parties to set their own flexible arrangements, as discussed in Section II.A.1.

220. E.g., Fairfield, supra note 25, at 49 (arguing that the decision in MDY "might serve as a 'nexus crystal'; a doctrinal catalyst around which doctrines that take seriously these important issues of consumer control could crystallize").

221. See Jacobellis v. Ohio, 378 U.S. 184, 197 (1964) (Stewart, J., concurring) (discussing how to identify "hard-core pornography" and stating that while it might be difficult to define exactly, "I know it when I see it").
MDY to hold whether licensors have a cause of action under copyright law against their licensees.222

The most remarkable and important finding of this study has to do with what those decisions lack. Those cases were unable to develop a normative approach that would give meaning to the nexus test and allow parties, and potential parties, to assess ex-ante the implications of a breach of the license agreement. In fact, I did not find a single opinion that even tried to establish a generally applicable test that would identify or more clearly define what is included and excluded in the elusive nexus requirement. Parties, thus, cannot know when a breach of a license will lead to copyright liability.

Instead of giving meaning to the nexus requirement, courts use other problematic approaches to decide when a breach of a license leads to liability under copyright law. The most common approach focuses solely on whether the licensee took an action that is one of the licensor’s exclusive rights under copyright law. In other words, if the licensee breached the license agreement and then engaged in an activity that, without a license, is copyright infringement, then the licensor has a cause of action under copyright.223

Etemadi v. Metropolitan Fashion Week is a simple example of this approach. The plaintiff argued that she orally granted the defendant a free license to publicly display a gown she designed and that “[a]s a condition of the license, [Defendant] promised to accurately credit Plaintiff as the Design’s creator whenever the gown was publicly exhibited.”224 The court denied the defendant’s motion to dismiss the copyright claim, holding that because public display is an exclusive right, all the plaintiff needed to do to establish a

222. I identified those opinions on the Westlaw database by first looking at all the opinions that cite MDY. As of July 15, 2021, there are 140 such opinions, which I read. Ninety-four of those opinions are irrelevant to the topic explored in this Article. Those opinions often refer to other parts of the opinion. While the Westlaw database covers federal and state courts opinions, 135 of those 140 opinions were from federal courts, including all 46 opinions that are discussed in this Section. That is not surprising, considering that the heart of the issue in MDY was whether the plaintiff has a cause of action under the Copyright Act, a federal statute. The Westlaw database includes all the decisions, published and unpublished, of federal courts for the relevant years.


copyright cause of action was to prove the content of the alleged oral license agreement.\textsuperscript{225}

This approach, however, flies in the face of \textit{MDY}. The heart of the nexus requirement is that taking an action that is an exclusive action under copyright law after the license was breached does \textit{not} suffice, and there needs to be some nexus between the two.\textsuperscript{226} Under this approach, which is often used by district courts within the Ninth Circuit’s jurisdiction,\textsuperscript{227} the nexus test is meaningless. In fact, under this approach, \textit{MDY} itself was wrongly decided because there was no doubt that the users of WoW breached the license (used bots) and then engaged in an exclusive right (copied the software to the computer’s memory).

\textit{Ticketmaster L.L.C. v. Prestige Entertainment West, Inc.} might be the clearest example of this tension, partly because, like \textit{MDY}, it deals with a breached promise not to use bots.\textsuperscript{228} The plaintiff licensed the HTML code of its website (which, like practically all the codes of any website, is protected by copyright) to users under an agreement that stated a host of conditions, including a restriction against using bots. The defendant was sued (as a contributor infringer) for hiring individuals who developed and used bots.\textsuperscript{229}

Much like in \textit{MDY}, the defendant in \textit{Ticketmaster} argued that even if the prohibition on bots was breached, this is a mere covenant and not a condition, and thus this can only establish liability for a breach of contract.\textsuperscript{230} The court refused to directly engage with that argument because it ruled that it is sufficient that the bot developers engaged in copying, which is an exclusive right.\textsuperscript{231} This, of course, guts \textit{MDY}’s test.

The court in \textit{Ticketmaster} unsuccessfully tried to support its decision on policy grounds. It suggested that “[t]he MDY court’s concern with the condition-versus-covenant distinction arose from public policy concerns that are not present in this case.”\textsuperscript{232} That is not true. The concerns are the same. In both cases, the copyright owner tried to impose non-standardized restrictions (prohibitions on bots) and back them with copyright law’s strong enforcement mechanisms. In \textit{MDY}, the Ninth Circuit blocked that attempt. In \textit{Ticketmaster}, the District Court for the Central District of California allowed it.

\begin{itemize}
\item \textsuperscript{225} See \textit{id.} at *4.
\item \textsuperscript{226} \textit{MDY Indus., LLC v. Blizzard Ent., Inc.}, 629 F.3d 928, 941 (9th Cir. 2010).
\item \textsuperscript{227} For example, the six opinions listed in note 223 are from district courts within the Ninth Circuit’s jurisdiction.
\item \textsuperscript{228} \textit{Ticketmaster}, 315 F. Supp. 3d at 1154.
\item \textsuperscript{229} \textit{id.} at 1154.
\item \textsuperscript{230} \textit{id.} at 1164.
\item \textsuperscript{231} \textit{id.} (“The condition-versus-covenant issue is moot in a scenario where, as here, the defendant has violated the plaintiff’s exclusive statutory right.”).
\item \textsuperscript{232} \textit{id.}
\end{itemize}
Disney Enterprises, Inc. v. Redbox Automated Retail, LLC is another major decision that focused on the existence of an action that was an exclusive right and nothing more. Disney sold a bundled product that included a Blu-ray disk and a code for digital downloads. Redbox unbundled the product and sold the digital download code. The users who purchased that code used it on Disney’s website to download the movie. That website’s Terms of Use prohibited users from using the code if the product was unbundled. Redbox was sued for assisting those users to infringe, but it argued that their actions were a mere breach of contract. The court succinctly stated that by downloading the movies “end users necessarily violate the terms of the licenses and, Disney contends, therefore infringe upon Disney’s copyrights.” In other words, the court rushed to move from a contractual cause of action to a copyright one without inquiring whether a covenant or a condition was breached and without bothering to consider the nexus between the bundling provision and Disney’s exclusive rights.

A different approach applies the rules of contract interpretation to decide if the language of the contract suggests that the breached provision was a condition or an independent promise. This approach is more prevalent in courts outside of the Ninth Circuit’s jurisdiction, although those courts often approvingly cite MDY. I will discuss a similar framework in greater detail in Part V. For now, suffice to say that this approach is also inconsistent with MDY’s nexus test. Under this approach, once the court concludes that the defendant breached a provision that contract law considers a condition for the license, any following action that violates an exclusive right is copyright infringement. No additional step, such as looking into the existence of a nexus, is needed.

The inconsistency in the 46 opinions in this study goes beyond the courts’ understanding of the nuances of the nexus test. The results themselves vary. Even within the Ninth Circuit’s jurisdiction, it is easy to find multiple opinions with indistinguishable facts and strikingly different outcomes.

The most obvious example of the discrepancy in results has to do with decisions concerning a promise to pay royalties. The core facts of those
cases are relatively simple. A license agreement allowed the defendant to use the plaintiff’s work in return for payment. The defendant then failed to pay the agreed-upon amount. While the plaintiffs in those cases clearly had a cause of action for the breach of the license agreement, a more difficult question was whether they also had a cause of action in copyright law (which would typically entail much higher damages).

As already noted, in MDY, the Ninth Circuit apparently answered that question by suggesting that there is always a nexus when it comes to a breach of the duty to pay. Therefore, those cases arguably should have led to liability for copyright infringement. I have noted that this rule, on its face, is unexplained and problematic. And indeed, the last ten years show that lower courts struggled with it.

Notwithstanding the Ninth Circuit’s arguably bright-line rule, lower courts’ decisions are unpredictable. Thirteen cases, almost 30 percent of all the cases in the study, dealt with a failure to pay. Shockingly, in the majority of those cases, seven out of thirteen, the court eventually held that the duty to pay was a mere covenant, which does not allow the licensor to sue for copyright infringement. For example, one court within the Ninth Circuit’s jurisdiction held that “[c]ourts in this circuit have recognized claims for copyright infringement where the licensee created or distributed copies in excess of explicit numeric conditions within the licensing agreement while rejecting such claims where the gravamen of the complaint was a failure to remit sufficient royalties.” Of course, to the degree that there is a bright-line rule within the Ninth Circuit’s jurisdiction, this district court got it exactly wrong.

More than ten years of litigation paint a dark picture. The Ninth Circuit created a vague and inconsistent rule that lower courts simply do not know how to apply. The result is significant contradictions in the caselaw, uncertainty, and unfairness. In this situation, even well-represented parties cannot predict the likely results of their actions. The outcome of such a copyright infringement claim often depends on the judge assigned to hear the case, and maybe just on their (conflicting) intuitions.


239. See supra text accompanying note 208.


D. THE TENSION WITH RECENT SUPREME COURT CASELAW

In the decade that followed the creation of the Vernor-MDY framework, the Supreme Court twice addressed the ways in which federal IP law can and cannot be used to impose long-term restrictions on purchasers. In 2013, in *Kirtsaeng v. John Wiley & Sons, Inc.*, the Court held that copyright law does not allow copyright owners to control the importation and resale of works that were created and first sold abroad.\textsuperscript{242} Four years later, in *Impression Products, Inc. v. Lexmark International, Inc.*, the Court held that patentees could not use restrictive licenses to stop buyers from transferring goods and cannot use patent law to prevent the importation and resale of inventions that were first sold abroad.\textsuperscript{243}

There is a clear tension between the Supreme Court’s perception of IP law and its relation to commercial law in general and the common law in particular, and that perception, as reflected in the Ninth Circuit decisions, in *Vernor* and *MDY*. For example, both Supreme Court decisions placed tremendous weight on the common law in applying doctrines that limit IP right-holders’ power to extract long-term control over items that they placed in the stream of commerce.\textsuperscript{244} The Court made clear that unless Congress clearly expressed a contrary intent, courts should assume that IP law is enacted against the backdrop of the common law and that the two are consistent.\textsuperscript{245} However, when it comes to software licenses, lower courts, including the Ninth Circuit in both *Vernor* and *MDY*, routinely deviate from core common law principles.\textsuperscript{246}

The greatest tension, however, exists between the Supreme Court decision in *Lexmark* and the Ninth Circuit decision in *Vernor*. Lexmark sold toner cartridges in which it embodied its patented technology. It initiated a “return program” in which, “in exchange for [a] lower price, [the buyer] signs a contract agreeing to use it only once and to refrain from transferring the empty cartridge to anyone but Lexmark.”\textsuperscript{247} The defendant, Impression Products, purchased those cartridges and refilled them.\textsuperscript{248} Lexmark sued for patent infringement, claiming that it granted its buyers a limited license that reserved the right to refill the cartridges.\textsuperscript{249} Therefore, the argument went, Lexmark kept that right to refill, and Impression Products’ actions infringed

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\textsuperscript{243} Impression Prods., Inc. v. Lexmark Int’l, Inc., 137 S. Ct. 1523, 1535, 1538 (2017).
\textsuperscript{244} Id. at 1531–32; *Kirtsaeng*, 568 U.S. at 536–38.
\textsuperscript{245} *Kirtsaeng*, 568 U.S. at 538–40; *Lexmark*, 137 S. Ct. at 1526.
\textsuperscript{246} See supra text accompanying notes 198, 214–17.
\textsuperscript{247} *Lexmark*, 137 S. Ct. at 1530.
\textsuperscript{248} Id. at 1526.
\textsuperscript{249} Id.
its patent rights. This claim was rooted and supported by well-established Federal Circuit precedents, going back to at least 1992.250

The Supreme Court unanimously overruled the Federal Circuit precedents and rejected Lexmark’s claim.251 While the decision directly involved patent law, its principles are more broadly applicable. The main driving force that runs throughout the Court’s reasoning is that patentees are not free to customize the rights that their buyers get.252 This mirrors the concern that this Article raises with respect to Vernor and the power it provides software companies to enforce non-standardized contracts through copyright law.253 In Lexmark, the Court clarified that a transaction that is recognized by personal property law (there, the sale of a product in which the patented technology was embodied) automatically triggers the buyer’s right to transfer the product.254

The Court prohibited patentees from circumventing their buyers’ rights through a license. It clarified that the right of the patentees simply expires upon the sale.255 In a segment that seems directly relevant to Vernor, the Court explained that the Federal Circuit erred by giving too much weight to the patentee’s licensing practices.256 The Supreme Court reminded the Federal Circuit that “a license is not about passing title to a product, it is about changing the contours of the patentee’s monopoly.” As mentioned,257 like the Federal Circuit, copyright courts also often conflate licenses over the IP rights (“changing the contours of the patentee’s monopoly”) with the nature of the transaction over the chattel in which they are embodied under private property rights (“passing title to a product”).

The Court further explained that the base premise of the Patent Act is that owners of patented goods are entitled to sell and otherwise transfer them.258 Specifically, patent law limits users’ rights (which, while the Court did not explicitly state so, is rooted in private property law), but once the relevant right under patent law is exhausted (meaning, expires), as is the case


251. Justice Ginsburg joined this part of the majority opinion, although she dissented with respect to another aspect of the opinion (which is irrelevant to the discussion in the Section). Justice Gorsuch did not take part in this decision. Lexmark, 137 S. Ct. at 1538.

252. Id. at 1532–35.


254. Lexmark, 137 S. Ct. at 1531.

255. Id. at 1533.

256. Id. at 1534.

257. Id.

258. See supra text accompanying notes 181–82.

259. See Lexmark, 137 S. Ct. at 1534.
upon the sale of the product, the buyers’ rights under private property law are back in full force. 260

The Court continued by suggesting that its holding is not just based on common law principles but also on policy considerations. 261 It noted that “the right to ‘restrain [] . . . further alienation’ after an initial sale” is simply not included within patent law. 262 If it were, the Court continued, it would have harmed the “smooth flow of commerce.” 263 Specifically, the Court was concerned that the existence of those use restrictions and “the very threat of patent liability would force [third parties] to invest in efforts to protect [themselves] from hidden lawsuits.” 264 This corresponds perfectly with the concern that this Article raises, based on the work of Merrill and Smith, concerning the risk associated with undermining the contract-copyright divide. 265

I am not suggesting that Lexmark explicitly overrules Vernor. From a narrow perspective, Lexmark deals with patent law and Vernor with copyright. 266 But the tension between the two is striking. In Vernor, the Ninth Circuit allowed copyright owners to summon copyright law and, with the stroke of their pen, impose any restriction they desire on their consumers. All that software companies need to do is to include a few magic words in their form agreement, and the essential step defense, which is designed to free users from the software companies’ power, evaporates. 267 In comparison, in Lexmark, the Supreme Court reversed the Federal Circuit, which until then allowed patentees to do a very similar thing: summon, solely with the strike of their pen, patent law to impose idiosyncratic long-term use restrictions on their buyers.

If Vernor is still good law, this might mean that the “Lexmarks” of the world can still easily impose their use restriction and back them up with patent law’s remedies. Instead of stating in their standard form agreements that they sell the toner cartridges with a limited patent license, they just need to state that they do not sell the toner cartridges at all but license them to their customers. This result is absurd. It makes no sense that the entire Supreme

260. Id.
261. Id. at 1332–33.
262. Id. at 1332 (alteration in original).
263. Id.
264. Id.
265. See supra text accompanying notes 129–32.
266. The Supreme Court, nevertheless, heavily relied on its recent copyright law caselaw in deciding Lexmark, noting the doctrinal similarities between the two and their mutual common-law foundation. Lexmark, 137 S. Ct. at 1332, 1335–36; see also Gomulkiewicz, supra note 25, at 428–29, 455–56 (claiming that Lexmark might not apply because the Patent Act did not codify the same statutory defenses that the Copyright Act did, but also noting that “[j]udicial acceptance of conditional sales contracts for patented products has largely paralleled judicial acceptance of EULAs for software” and that therefore Lexmark “presents a watershed moment for software licensing”).
267. See supra text accompanying note 200.
Court jurisprudence regarding the right of users, and the sound public policy in which it is rooted, can be easily set aside by this mere technical change.

Indeed, while in *Lexmark* the Supreme Court did not explicitly overrule *Vernor*, its reasoning “undercut[s] the theory or reasoning underlying the prior circuit precedent,” to the point that the two “are clearly irreconcilable.”268 Courts outside the Ninth Circuit should, therefore, reject *Vernor*. In fact, under Ninth Circuit precedent, under these circumstances, even a three-judge panel of the Circuit can hold that a prior Circuit precedent has been effectively overruled.269

E. THE CIRCUIT SPLIT WITH THE SECOND CIRCUIT

The Ninth Circuit and the Second Circuit are the most important appellate courts in the country when it comes to copyright law.270 In 2005, in *Krause v. Titleserv, Inc.*, the Second Circuit held that when deciding if a transaction over software triggers the essential step defense, a court should conduct a holistic inquiry, where the economic realities of the transaction, and not just the language of the contract, are taken into account.271 This reasoning is sometimes referred to as the economic realities approach.272

Until recently, *Titleserv* was the only Second Circuit decision on the effect of such licenses on the essential step defense.273 In fact, neither the Second Circuit nor any district court within its jurisdiction, including the highly influential Southern District of New York, have visited the issue since 2005. *Titleserv* received relatively little attention outside the Second Circuit’s jurisdiction. The *Titleserv* approach was adopted in four decisions from three district courts,274 and was explicitly distinguished by two other courts, including the Ninth Circuit in *Vernor*.275 Those later courts noted that *Titleserv* dealt with an oral agreement and, therefore, they suggested that the holding does not apply to written licenses.276

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268. Miller v. Gammie, 335 F.3d 889, 900 (9th Cir. 2003).
269. Id.
270. Lemley & Volokh, supra note 62, at 161.
272. See Carver, supra note 136, at 1915–19; Rub, supra note 25, at 814–16.
273. While both the Second and the Ninth Circuits highly affect copyright law, the Ninth Circuit, which has jurisdiction over the Silicon Valley, tackles disputes concerning software, including software licenses, frequently. See also supra note 174 and accompanying text (discussing the influence of Ninth Circuit decisions concerning software and copyright, including outside of its jurisdiction).
However, in 2019, in *Universal Instruments Corp. v. Micro Systems Engineering, Inc.*, the Second Circuit revisited the issue.277 The plaintiff-licensor in *Universal Instruments* urged the Second Circuit to adopt the *Vernor-MDY* framework, but the Second Circuit refused and instead reaffirmed its economic realities approach and applied it in a case concerning a written license agreement.278 In doing so, the Second Circuit made clear that there is indeed a circuit split between the two courts.279

This circuit split is meaningful not just as a matter of doctrine. The different approaches also dictate the results of those cases. In *Titleserv*, and in all the cases that adopted it, the defendants were held to be owners of the copies of the copyrighted work and thus entitled to the full statutory defenses of owners. In contrast, in 11 of the 14 decisions that applied *Vernor*, the defendants were held to be mere licensees and were denied those defenses.280

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**V. A COMMERCIAL LAW APPROACH FOR REGULATING USE RESTRICTIONS**

The previous Parts showed that the *Vernor-MDY* framework failed and needs to be abandoned. It should be discarded by the Ninth Circuit, rejected elsewhere, or reversed by the Supreme Court.

This Part offers an alternative and superior approach. Section A explains the proposed framework, which it calls the commercial law approach, and which gives copyright owners significant leeway, but only as a matter of contract law. Section B explains why that approach is consistent with copyright policy. Section C analyzes the recent Second Circuit caselaw, which applies a similar, although not identical, approach to the one this Part calls for. Section D

278. *Id.* at 47–48.
279. This decision will be analyzed in detail in Section V.C.
280. Two of the remaining cases were decided by the Ninth Circuit. In the first, *UMG Recordings, Inc. v. Augusto*, 628 F.3d 1175, 1180–83 (9th Cir. 2011), the court concluded that the succinct license in question did not meet the requirements of *Vernor*. In the second, *Adobe Sys. Inc. v. Christenson*, 809 F.3d 1071, 1077–86 (9th Cir. 2015), the court held that the plaintiff failed to attach the license agreement to its pleadings and failed to otherwise prove the content of the license. In the third one, *Britware Consulting, Inc. v. Con-Tech Mfg., Inc.*, No. 20-CV-1006, 2021 WL 1140223, at *3 (D. Minn. Mar. 25, 2021), the court did not directly rely on *Vernor* but noted that even under *Vernor* the defendant in the case would be an owner because the contract between the parties did not include the language that *Vernor* required.
applies the commercial law approach to several common or controversial use restrictions.

A. Suing Licensees for Copyright Infringement: A Commercial Law Approach

The Vernor-MDY framework was supposed to be consistent with state contract law, but it is not.281 In MDY, the Ninth Circuit stated:

We refer to contractual terms that limit a license's scope as "conditions," the breach of which constitute [sic] copyright infringement. We refer to all other license terms as "covenants," the breach of which is actionable only under contract law. We distinguish between conditions and covenants according to state contract law, to the extent consistent with federal copyright law and policy.282

This Section, in contrast, aims to do what the Ninth Circuit said that it was doing: offer a detailed step-by-step approach for assessing the legal implications of a breach of a license agreement in a way that is actually "according to state contract law." The next Section will show that this framework is indeed consistent, and works in tandem with, "federal copyright law and policy."

One major source of confusion has to do with inaccurate—and even worse, ambiguous—ways in which courts often describe breaches of license agreements. For example, in MDY, the Ninth Circuit repeatedly stated that courts need to consider whether copyright licensees "exceed the scope of the . . . license."283 This is a common phrase that was used by courts before and after MDY.284 Alternatively, courts ask if the licensee's use was "beyond the scope" of the license.285 While those phrases are not wrong per se, they are

281. See supra text accompanying notes 212–18.
282. MDY Indus., LLC v. Blizzard Ent., Inc., 629 F.3d 928, 939 (9th Cir. 2010) (emphasis added) (citations omitted).
283. Id. at 940–41.
285. See, e.g., Frank Music Corp. v. Metro-Goldwyn-Mayer Inc., 886 F.2d 1545, 1548 (9th Cir. 1989) ("[T]he use [by the defendant] was beyond the scope of [its] license and infringed plaintiffs' copyright."); see also Carlin v. Bezos, 649 F. App’x 181, 182 (3d Cir. 2016) (considering whether a licensee’s use was beyond the scope of its license); Tattoo Art, Inc. v. TAT Int’l LLC,
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confusing because they are mostly meaningless as a matter of contract law, and worse: they refer to two distinct situations.

This Section untangles this ambiguity by distinguishing and separately analyzing those two situations. I will call one the “uncovered act” situation and the other a “failed condition” situation.

1. Uncovered Actions: When Licensees Take Unauthorized Actions

The first situation in which a court might conclude that the licensee “exceeded” the scope of a license can be more accurately called an “uncovered act” situation. In such a case, the action that the licensee took is simply not covered and not within the scope of the license agreement. Those cases are relatively simpler as they do not require the court to classify parts of the contract as covenants or conditions. In such a case, if the action that was taken was an exclusive right under copyright law, and if no defense, such as fair use, applies, the licensee infringed the licensor’s copyright.

If, for example, the licensor granted a license to translate a copyright-protected book into Dothraki, and the licensee translated it to Klingon, then the analysis can be quite straightforward. A translation is a derivative work of the original book, and preparing derivatives works is an exclusive right under copyright law. Therefore, if no other defense applies, this is a simple case of copyright infringement. In a more common case, the licensor authorizes the licensee to reproduce a pre-determined number of copies (e.g., “the licensee will print 5,000 copies of the book”), but the licensee reproduces additional copies (e.g., prints 6,000 copies). In that case, the additional reproductions (e.g., the printing of the last 1,000 copies) is simply not covered by the license and is therefore unauthorized. If no other defense applies, that action infringes the copyright owner’s exclusive right of reproduction.

Adobe Systems Inc. v. Blue Source Group, Inc. demonstrates this point. In that case, the defendant allegedly distributed in the United States the

498 F. App’x 341, 346 (4th Cir. 2012) (same); Bourne v. Walt Disney Co., 68 F.3d 621, 631 (2d Cir. 1995) (same); NLFC, Inc. v. Devcom Mid-Am., Inc., 45 F.3d 231, 235 n.5 (7th Cir. 1995) (same).

286. 17 U.S.C. § 101 (2018) (“A ‘derivative work’ is a work based upon one or more preexisting works, such as a translation . . . .”).

287. Id. § 106(2).


289. While it is uncommon, in an “uncovered action” situation, the licensee might be liable under copyright law even without breaching the license agreement. For example, if the agreement states that the licensee is authorized to translate a book into Dothraki, then translating it into Klingon might not be a breach of the contract but would still be infringing the copyright in the book.

plaintiff’s copyrighted software, while the license only authorized distribution abroad. The court correctly stated that the plaintiff had a cause of action under copyright law. In reaching that conclusion, the court did not consider, and did not need to consider, whether parts of the license were covenants or conditions, nor did it engage in analyzing the nexus between the contract and copyright.

At times, courts unnecessarily struggle with “uncovered act” situations. Grumpy Cat Ltd. v. Grenade Beverage LLC is an example of such a case. In that case, the licensor granted the licensee a right to reproduce an image of a famous cat, known as Grumpy Cat, on non-alcoholic beverages. The licensee, however, printed the picture on other products. The court conducted an extensive inquiry, partly using state contract law, as to whether the license agreement scope provision was a condition or a covenant. It concluded it was a condition and, therefore, the licensee infringed on the licensor’s copyright. While the result is correct, the opinion is needlessly complicated. If a license states that the licensee is authorized to reproduce an image in a certain way, then (putting aside fair use and other defenses), any different form of reproduction is infringing.

2. A Failed Condition: When a Breach Makes an Action Unauthorized

The facts of MDY v. Blizzard seem fundamentally different from those of the “uncovered act” cases discussed above. The users allegedly infringed Blizzard’s copyright by taking an action—creating temporary RAM copies by playing a video game—that Blizzard initially authorized. Blizzard, however, argued that another action by the users—running a bot software—terminated the license and caused the authorized action to become unauthorized.

Those types of cases can be described as a failed condition situation. The license that was in place was arguably terminated by the breach, thus denying the licensee the initially granted authorization. Then, if the licensee continued to use the work in a way that implicated one of the exclusive rights (e.g., reproduce it), and if no other defense applies, the licensor has a cause

291. Id. at 954–55.
292. Id. at 971.
294. Id. at *2.
295. Id. at *3.
296. Id. at *3–7.
297. Id. at *7.
of action for copyright infringement. A common fact pattern in this category has to do with a promise to pay royalties for a certain use.\textsuperscript{299} When the licensee fails to pay it but continues to reproduce or publicly display the work, courts must analyze the contract to determine if the licensor can sue for copyright infringement.

This type of complex cases requires closer analysis.\textsuperscript{300} Let’s assume that a copyright owner granted a license, and the licensee promised to take a certain act (e.g., pay royalties) or refrain from a certain act (e.g., use bots) and breached that promise. In order to decide if this breach may lead to copyright infringement, courts need to distinguish between conditions and covenants.

Promises, i.e., covenants, and conditions, are the building blocks of practically all contracts.\textsuperscript{301} “A promise is a manifestation of intention to act or refrain from acting in a specified way . . . .”\textsuperscript{302} We already saw multiple promises in this Article, such as the promise not to install bots, at issue in \textit{MDY},\textsuperscript{303} a promise to refrain from commercial use,\textsuperscript{304} or a promise to pay royalties.\textsuperscript{305} “A condition is [defined as] an event, not certain to occur, which must occur . . . before performance under a contract becomes due.”\textsuperscript{306} For example, if Alice tells Bob, “I promise to give you an umbrella if it rains on Sunday,” the occurrence of rain is a condition for Alice’s promises. If a...
condition does not materialize, for example, if Sunday turns out to be a sunny day, the conditioned promise does not become due.\textsuperscript{307}

In many copyright cases, courts use the terms "conditions" and "promises\covenants" slightly inaccurately. Those cases use the term "conditions" to refer to a specific type of conditions: promises that are \textit{explicit} conditions to other promises. For example, if a contract provides that “Bob will pay Alice $20, and then Alice will give him an umbrella,” then Bob’s payment is both a promise to pay and an explicit condition for Alice’s promise to give him the umbrella. Covenants, as used in those cases, are promises that are not explicit conditions to other promises, and in particular, not explicit conditions to the license.\textsuperscript{308}

Common-law courts have developed rules (that copyright courts do not always follow) to distinguish between conditions and covenants that can (and should) be applied to copyright licenses. The first question that a court must ask when it faces a breach of a copyright license agreement is whether the breached provision was an \textit{explicit} condition for the license. This is a pure question of contract interpretation.\textsuperscript{309} However, in case of ambiguity, courts prefer to hold that a promise is not an explicit condition.\textsuperscript{310}

The Restatement of Contracts explains that: “No particular form of language is necessary to make an event a condition, although such words as ‘on condition that,’ ‘provided that’ and ‘if’ are often used for this purpose.”\textsuperscript{311} Indeed, if the license clearly makes the promise a condition for the license, the parties’ choice needs to be respected. Explicit conditions are generally strictly enforced.\textsuperscript{312} Therefore, when it comes to copyright licenses, the failure

\textsuperscript{307}. Id. § 225.

\textsuperscript{308}. Those classifications are inaccurate as a matter of contract law. Under contract law, conditions can also be promises, sometimes referred to as "promissory conditions," but they can also be pure conditions, which are not promises. Similarly, suggesting that a provision in a contract is a covenant does not preclude, as a matter of contract law, finding it to be an explicit, and even more commonly implicit, condition. \textit{Hillman}, supra note 93, at 273–74. Many copyright law cases thus somewhat oversimplify the distinction between the two.

\textsuperscript{309}. \textit{Restatement (Second) of Conts.} § 226 cmt. a (Am. L. Inst. 1981) (“Whether the parties have, by their agreement, made an event a condition is determined by the process of interpretation.”); \textit{Weber v. N. Loup River Pub. Power & Irrigation Dist.}, 854 N.W.2d 263, 270–71 (Neb. 2014); \textit{Ard}, supra note 25, at 317. The approach this Section calls for can be criticized as placing too significant a weight on the exact wording that the parties chose. See \textit{Ben-Shahar}, supra note 25, at 10–15 (suggesting that “[s]mall, hairsplitting differences in facts or characterization could lead to dramatic, discontinuous jumps in the magnitude of damages”). Nevertheless, sophisticated parties can draft clear agreements that would provide them with partial control over the implications of a future breach. Predictable enforcement of those terms will only encourage better drafting. As the next Section will explain, this choice is rarely relevant when businesses interact with consumers, because, under this approach, businesses will rarely have a cause of action in copyright law against their consumers, regardless of the license.

\textsuperscript{310}. \textit{Restatement (Second) of Conts.} § 227 (Am. L. Inst. 1981); \textit{Hillman}, supra note 93, at 279; \textit{Weber}, 854 N.W.2d at 270–71; \textit{Israel v. Chabra}, 537 F.3d 86, 93 (2d Cir. 2008).

\textsuperscript{311}. \textit{Restatement (Second) of Conts.} § 226 cmt. a (Am. L. Inst. 1981).

\textsuperscript{312}. See, e.g., \textit{Capistrant v. Lifetouch Nat’l Sch. Studios, Inc.}, 916 N.W.2d 23, 27–28 (Minn. 2018) (“Our precedent reflects the ‘general rule’ that ‘conditions . . . must be literally met or
to perform a promise that is an explicit condition makes the conditioned license inoperable. Once the condition for the license fails, any action that the licensee takes is not authorized by the licensor. If the licensee now takes an action that is an exclusive right, such as copying or distributing the work, and if no copyright defense applies, then the licensee committed copyright infringement.

If the court decides that the breached promise is not an explicit condition, it needs to consider if it is an implied condition. Most contract promises are dependable, meaning that the material performance of an early promise is an implied condition for a later promise. When a promise becomes due and is materially breached, any existing dependable promises are suspended and might eventually be terminated. Therefore, if the licensee materially breached the license agreement, the license becomes suspended. At this stage too, unless another defense applies, the licensee cannot take any action that is an exclusive right, or else the licensee will infringe the licensor’s copyright.

The question of materiality can be complex. The Restatement, however, lists multiple factors that can be considered, such as whether the licensor was denied the benefits of the transaction, the licensee’s good faith, and more. Moreover, in deciding on materiality, courts can rely on rich caselaw in contract law. For example, in MDY, it might have been reasonable to conclude that the breach of the antibot provision was immaterial, as it did not go to the heart of the parties' bargain. In contrast, consider the failure to pay royalties (pursuant to a license agreement that does not make the payment an explicit condition to the license). On the one hand, an intentional failure to pay any royalties is likely to be considered material, as it typically goes to the heart of the licensee's consideration, and thus it will lead to the suspension of the

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313. RESTATEMENT (SECOND) OF CONTS. § 232 (AM. L. INST. 1981); HILLMAN, supra note 93, at 274.


315. Id. § 241.
license and give rise to a copyright cause of action.\footnote{316} On the other hand, a small good faith mistake in calculating the royalties will likely not be considered material, and therefore, it will not suspend the license and will only give rise to a breach of contract claim.

There is another wrinkle to the analysis, however. Courts often state that the distinction between a promise or a condition is a question of contract law.\footnote{317} This Section holds them to their words and explains how contract law actually addresses that question. However, this is not a purely contractual issue. A copyright license agreement incorporates two legal mechanisms. It is a contract, but it is also a license, meaning it authorizes, as a matter of property law, the licensee to take certain actions without being considered an infringer.\footnote{318} The precise question is, therefore, not whether those are conditions in the contractual sense of the word but whether they are conditions that property law recognizes as terminating a defeasible license.\footnote{319} Nevertheless, answering this question requires courts to assess the reasonable intent of the licensor, which is luckily the same inquiry that contract law engages in when the licensor expresses its intent through a license agreement.\footnote{320}

Indeed, if one cares to implement “state contract law,” as the Ninth Circuit said it did, but as it did not do, those are the steps that needed to be followed. But maybe copyright law should just reject this approach—rooted in state commercial law—altogether in order to promote federal IP policy? The next Sections will explain why there is no need to do so.

\section*{B. The Commercial Law Approach and Copyright Policy}

There are several built-in advantages in grounding our approach to handling breaches of copyright licenses in notions of commercial law, and in particular, contract and property law. For example, it eliminates the need to have one set of rules for IP licenses and another for non-IP contracts. This will

\footnotetext[316]{316. The license, while effective, is an ongoing authorization by the licensor. Its ongoing nature, however, does not affect the analysis. This is similar to a commercial lease, where the landlord’s duty to let the tenant use the leased property is ongoing. However, once the tenant materially breaches the lease, the landlord can typically suspend the contract and evacuate the tenant. \cite{See, e.g., Fifty States Mgmt. Corp. v. Pioneer Auto Parks, Inc., 389 N.E.2d 113, 115 (N.Y. 1979).}}

\footnotetext[317]{317. \cite{See, e.g., MDY Indus., LLC v. Blizzard Ent., Inc., 629 F.3d 928, 939 (9th Cir. 2010).}}

\footnotetext[318]{318. \cite{See supra text accompanying notes 177–80.}}

\footnotetext[319]{319. Newman, supra note 25, at 1153–56.}}

\footnotetext[320]{320. Professor Newman, in his comprehensive work on copyright licenses, agreed that explicit contractual conditions are also “conditions subsequent to a defeasible property interest” but argued that material breaches are not enough to terminate the license. \cite{Id. at 1156. My view is different. In most cases, the rules concerning material breaches are rooted in the reasonable understanding of contracting parties. It is reasonable, I argue, that licensors would believe that the license, meaning the authorization to use their work, is subject to the lack of material breach by their licensees. This default rule, like most default rules, reduces the parties’ drafting costs.}}
remove a source of confusion and allow federal courts to freely rely on a substantial body of commercial law caselaw, enriched over centuries of common law development. As noted, federal IP law already heavily relies on state commercial law principles, and thus consistency between those areas of the law is desirable.321

Still, the preference to maintain consistency between the common law and state commercial law, on the one hand, and federal law, on the other hand, has its limits. In *MDY*, the Ninth Circuit correctly noted that when adjudicating a copyright dispute, courts should apply "state contract law," but only "to the extent consistent with federal copyright law and policy."322 Indeed, if federal courts believe that federal IP policy requires them to develop separate and distinguished rules to interpret and enforce contracts, they have the power and even the obligation to do so.323

However, this Section explains that even from a copyright law policy there is no need to set forth a different set of rules for copyright licenses. The framework that was offered in Section A does not conflict with or undermine federal policy. Specifically, it does not destabilize the contract-copyright divide as it does not allow copyright owners to impose non-standardized restrictions on their users that are backed up by copyright law's strong enforcement mechanisms.

License agreements, even conditional licenses, have limited power because they cannot, by themselves, create a cause of action in copyright law. At most, well-drafted contracts can cause a copyright license to be suspended or terminated upon a breach of a use restriction. But that does not automatically create liability for copyright infringement, unless the licensee takes actions that would have been infringing, but for the license.

Most private users of copyright-protected goods do not need licenses.324 Their standard actions do not infringe copyright even without a license. Buyers of books, for example, can read them, lend them to others, resell

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321. *See supra* note 182. Some, however, might worry that basing this framework on state law might undermine copyright law’s attempt to set forth a nationwide uniform legal scheme. *See,* e.g., *Krause v. Titleserv, Inc.,* 402 F.3d 119, 123 (2d Cir. 2005); *Carver, supra* note 136, at 1951–53. I do not find this concern troubling. First, commercial law principles are quite uniform, even if not identical, across all states, especially after all of them adopted the Uniform Commercial Code. *Duffy & Hynes, supra* note 63, at 71. Second, and more important, federal copyright law does not assume complete uniformity. As noted in Section IV.A.1, it heavily relies on terms of art and concepts that are developed by state laws.

322. *MDY,* 629 F.3d at 939.

323. Still, in order to minimize confusion, one would hope that even when federal courts decide to deviate from underlying commercial norms, they will do it explicitly, and preferably, without using the terms of art that are already well established under commercial law. As explored in Section IV.B, the Ninth Circuit failed to do that in *MDY*, which contributed to the chaos in the caselaw.

324. While it is generally agreed upon that personal use does not infringe copyright, at the margins, the line between personal use and commercial use is blurry, and many argue that the zone of personal use is shrinking. *Jessica Litman, Lawful Personal Use,* 85 TEX. L. REV. 1871, 1872 (2007).
them, cite small sections thereof, and so on.\textsuperscript{325} The publisher can draft a form agreement that will limit some of those actions (e.g., the buyer might promise not to read the last ten pages of the book, or write a favorite review thereof, or not sell it in another state). It can even condition a copyright license on the user’s compliance. However, a breach of those promises will, at most, result in liability under contract law. While the breach may also terminate any copyright license, even without such a license in place, the buyer is unlikely to take any action that gives rise to liability under copyright law.\textsuperscript{326}

While copyright owners are free to sue their users for the breach of any contractual promise, including an idiosyncratic one, such a lawsuit will be subject to all the inherent limitations of contract law,\textsuperscript{327} which will likely make it inefficient and typically not worthwhile. In other words, while copyright owners are free to impose flexible non-standardized restrictions on their users, those restrictions can be backed up only by weak enforcement mechanisms.\textsuperscript{328}

Software and digital goods present another wrinkle. As discussed in Part III, users cannot use those goods without creating temporary copies in the

\textsuperscript{325} Fisher III, \textit{supra} note 12, at 1204–06; Rub, \textit{supra} note 12, at 257.

\textsuperscript{326} Future creators similarly do not primarily rely on a license from copyright owners. Their ability to use the creativity of their predecessors mostly relies on the built-in limitations within copyright law, and in particular, on the idea-expression dichotomy, which leaves ideas, procedures, concepts, and so on in the public domain, 17 U.S.C. § 102(b) (2018), as well as the fair use defense, \textit{id.} § 107; see also \textit{infra} Section V.D.3 (discussing application of the fair use defense).

\textsuperscript{327} See \textit{supra} text accompanying notes 89–99 (explaining how such claims entail limited remedies and provide no cause of action against downstream possessors and other third parties).

\textsuperscript{328} This scheme can be compared to the one that exists with respect to real property. Landowners can create real covenants on their land which will run with it, meaning that it will bind downstream owners. SINGER, \textit{supra} note 177, at 230–32. However, in many jurisdictions, in order to be enforceable against third parties—to run with the land—the restriction must, among other things, touch and concern the land, meaning that “it has something to do with the use of the land and/or is connected with enjoyment of the land.” \textit{id.} at 257–58.

Professor Van Houweling suggested that the nexus requirement can play a similar role. Van Houweling, \textit{supra} note 202, at 1079–81. Like the touch and concern doctrine, the nexus requirement filters certain use restrictions and serves as a gatekeeper that determines which of them can rise to a property right. To use the terminology developed in Part II, one may claim that both doctrines are designed to limit the ability of individuals to create flexible and powerful use restrictions.

While the argument is sophisticated and valuable, there are also limits to the comparison between the two doctrines. First, as explored in Part IV, unlike the touch and concern doctrine, the nexus requirement is so vague and meaningless that it results in arbitrary and inconsistent caselaw. Second, and more important, copyright law already has filtering mechanisms. In the real property context, without the doctrine of touch and concern, subject to certain formalities, SINGER, \textit{supra} note 177, at 238–57, every contractual promise might turn into a property right, thus achieving undesirable flexible use restrictions that are enforced by property law. But this Section explains that when it comes to copyright licenses, once \textit{Vernor} is rejected, copyright law itself filters out many contractual restrictions. Consequently, most of those restrictions can only be enforced as a matter of contract law.
computer’s memory. If those copies are considered permanent enough to be reproductions under copyright law, and they typically are,329 and if no defense applies, a question we will visit shortly, then a license is required.330 If the license is not in effect, the user might not be able to use the copyrighted good at all without committing copyright infringement. Therefore, this could allow copyright owners, and in particular software companies, to customize copyright law by imposing restrictions that are both non-standardized and are backed up by copyright law’s strong enforcement mechanisms. That is exactly the concern that caused the Ninth Circuit to come up with the failed nexus test.331

Luckily, Congress addressed this concern by enacting the essential step defense. That defense allows purchasers of computer programs, meaning software and digital goods, to create copies that are essential to the operation of the program.332 Copies that are just automatically stored temporarily in the computer’s RAM nicely fit that definition.

The Ninth Circuit precedents, and primarily Vernor, that allow software companies to easily circumvent the essential step defense, need to be reversed. As explained in detail in Part IV, the line of cases culminating in Vernor is wrong as a matter of both law and policy. Ideally, courts should hold that tangible objects cannot be licensed at all. However, at the minimum, courts should embrace the economic realities approach, and hold that a transaction that looks like a sale—for example, if it includes a de facto permanent transfer of possession—is, indeed, a sale.333

Therefore, in the post-Vernor world, a permanent transfer of software will trigger the essential step defense, exactly as Congress intended when enacting it.334 This will put software and digital goods on equal footing with books, movies, visual art, and any other forms of creativity.335 In all cases, users should not need a license for the regular use of their purchased copyrighted goods.

With the essential step defense in full force, if the commercial law approach is adopted, software companies and other providers of digital goods

329. See supra notes 138–40 and accompanying text.
330. See supra notes 138–40 and accompanying text.
331. See supra text accompanying notes 168–71.
332. See supra text accompanying notes 142–43.
333. See supra text accompanying notes 188–92, 271–72.
334. Nat’l Comm’n on New Tech. Uses of Copyrighted Works, supra note 142, at 13 (noting that the essential step defense is needed because the distributor of computer programs “intend that they be used by their customers, so that rightful users would but rarely need a legal shield against potential copyright problems”).
335. The application of the essential step defense to digital goods that users download (rather than buy a tangible good, like a disk) is quite straightforward in the post-Vernor world. The essential step defense is triggered once the user is the owner of the physical object in which the work is embodied. Users are the owners of the hard drive in which the copies of downloaded goods are stored, and therefore, the defense is triggered as soon as the object is saved on the user’s computer.
will still be able to create contractual restrictions on future use. But a breach of such restrictions, which might leave the users without a license in place, will not make them copyright infringers. Indeed, software companies should be allowed to create flexible and weakly enforced use restrictions. Once the Vernor-MDY framework is rejected, the commercial law approach will allow them that and nothing more.

C. THE SECOND CIRCUIT’S UNIVERSAL INSTRUMENTS V. MICRO SYSTEM ENGINEERING

The Second Circuit’s recent decision in Universal Instruments Corp. v. Micro Systems Engineering, Inc., despite certain shortcomings which will be addressed below, shows how, in a jurisdiction that does not follow the faulty Vernor-MDY framework, the essential step defense can restore the balance to the world of software licenses. In this case, Universal developed the first phase in a software project that Micro System Engineering (“MSE”) used in its production line. MSE then granted the second phase of the project to a competitor, which, as part of that later phase, made minor modifications to Universal’s software. The Second Circuit interpreted the contract between Universal and MSE and ruled that it allowed the latter to reproduce and deliver the software to the competitor, but that it did not explicitly allow the alteration of the software.

When a computer program is altered, the new version is typically considered a derivative of the original one. Preparing a derivative work is an exclusive right of the copyright owner and typically requires a license. MSE, however, argued that its modification was not infringing due to the essential step defense. As the essential step defense is available only to owners of the tangible copy, the Second Circuit had to decide if MSE was the owner of the copy of the software.

The Second Circuit rules that MSE was indeed the owner for the purpose of the essential step defense. The court mentioned the Ninth Circuit’s approach in Vernor, which focuses exclusively on the language of the contract, noted that it could have helped the plaintiff, and, while not explicitly rejecting it, stated a different test, which was based on its 2005 decision in Krause v. Titleserv, Inc.:

“[O]wner as used in § 117(a) [the essential step defense] does not require formal title in a program copy. . . . [T]he following facts [are] sufficient to consider defendant an owner under § 117(a):

337. Id.
338. Id. at 41–43.
340. Universal Instruments, 924 F.3d at 48.
341. Id. at 45.
defendant paid plaintiff "substantial consideration to develop the programs for its sole benefit"; plaintiff "customized the software to serve [defendant's] operations"; plaintiff stored copies "on a server owned by [defendant]"; plaintiff "never reserved the right to repossess the copies used by [defendant] and agreed that [defendant] had the right to continue to possess and use the programs forever, regardless whether its relationship with [defendant] terminated"; and "[defendant] was similarly free to discard or destroy the copies any time it wished."342

In this case, while the contract placed some restrictions on the defendant's use, the court held that other factors clearly leaned toward ownership for the essential defense purpose.343

This test is a significant improvement over the Ninth Circuit's approach in Vernor. Critically, in deciding ownership, it does not place all the weight on the four corners of the contract, but instead looks at the parties' actual behavior. That in itself gives the essential step defense real teeth, as the result in Universal Instruments demonstrates.

While the Second Circuit's approach significantly promotes important IP policy, it is not perfect. First, the above-mentioned inquiry still commingled the question of the ownership of the tangible copy with that of the intellectual property. A more careful analysis could have made this part of the opinion extremely simple. As the software was stored on MSE's servers, MSE was clearly the owner of the tangible medium and thus entitled to the essential step defense. As such, in this case, no analysis into the exact nature of the transaction was needed.

Second, the Second Circuit's test still places some weight on the contractual language.344 It is therefore uncertain whether a clearer language, especially concerning the right to retake possession, would have made a difference. Nevertheless, the opinion in Titleserv seems to have placed most of the weight on whether the user was given de facto permanent possession of the good.345 Some of the courts that adopted Titleserv, as well as a few scholars, also stressed this factor over others.346

342. Id. at 44–45 (fifth, sixth, seventh, eighth, ninth, and tenth alterations in original) (quoting Krause v. Titleserv, Inc., 402 F.3d 119, 123–24 (2d Cir. 2005)).

343. See id. at 45.

344. Id. (referring to the contract by nothing that the "plaintiff 'never reserved the right to repossess the copies used by [defendant] and agreed that [defendant] had the right to continue to possess and use the programs forever, regardless whether its relationship with [defendant] terminated" (alterations in original) (quoting Knouse, 402 F.3d at 124)).

345. Knouse, 402 F.3d at 123 ("[I]t seems anomalous for a user whose degree of ownership of a copy is so complete that he may lawfully use it and keep it forever, or if so disposed, throw it in the trash, to be nonetheless unauthorized to fix it when it develops a bug . . . .").

decisions that established the rule—Titleserv and Universal Instruments—dealt with transactions between sophisticated parties. One would hope that the Second Circuit will place even less weight, or maybe none at all, on the language of a standard form contract in a transaction between a software company and a consumer.

A third challenge in the Second Circuit’s approach is that it was not fully rooted in principles of personal property law. The court seemed to be willing to consider the possibility of a mere license over chattel, which, as we saw, personal property law does not recognize, although it ruled that that status was not created in either Titleserv or Universal Instruments. Moreover, the court suggested that it was creating its own definition for the term “ownership,” as it is used in the essential step defense that does not entail an inquiry into the identity of the title holder. Doing so puts the decision in some tension with Supreme Court IP caselaw, which stresses that when Congress uses a term that is well established under common law, such as “ownership,” it typically incorporated the common law meaning of the term. Finally, this deviation is not needed. As explained, in a transaction like this one, when the software is embodied on the purchaser’s server or when the possession of a copy is permanently given to a payer, that purchaser/payer is the owner of the copy of the software under personal property law as well.

Finally, the Second Circuit wrongly dismissed the plaintiff’s breach of contract cause of action, holding it was preempted by the Copyright Act. Elsewhere, I considered when contracts should be preempted by the Copyright Act and showed that preemption is rarely justified, either by law or

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348. See supra Section IV.A.1.
349. It is, however, important to note that in practice the Second Circuit’s test is clearly pro-users. In fact, situations in which the Second Circuit’s test is applied, and the user nevertheless is found to be a non-owner mere-licensee are likely very rare, and maybe nonexistent. As noted in Section IV.E, until now, every judge who applied this test concluded that the user was an owner. As such, this test might be perceived as almost a legal fiction that suggests (correctly) that de facto users of purchased software cannot be mere licensees.
350. Universal Instruments Corp., 924 F.3d at 45. Compare Universal Instruments Corp., 924 F.3d at 45, with MDY Indus., LLC v. Blizzard Ent., Inc., 629 F.3d 928, 939–40 (9th Cir. 2010) (where the Ninth Circuit also deviated from state law but did not point out it was doing so).
351. Kirtsaeng v. John Wiley & Sons, Inc., 568 U.S. 519, 538 (2013); Impression Prods., Inc. v. Lexmark Int’l, Inc., 137 S. Ct. 1523, 1555 (2017); see also supra Section IV.D (discussing the tension between the Supreme Court caselaw and the Ninth Circuit deviation from common law concepts).
353. See supra text accompanying notes 188–92.
354. Universal Instruments Corp., 924 F.3d at 32, 48–49.
by policy, and that most courts correctly refuse to hold a breach of contract claim preempted.\textsuperscript{355}

The analysis that this Article conducts further shows that contracts should typically not be preempted by copyright. As explained in Part II, courts should police the contract-property divide and prevent copyright owners from creating flexible contractual norms that are enforced by copyright law’s mechanisms, including its limited remedies. Therefore, it is important that the Second Circuit rejected Universal’s copyright claim. But its contractual claim does not raise similar concerns. It is backed up by contract law’s weaker enforcement mechanisms, and thus there is no real reason to prevent sophisticated parties from promising to modify or not to modify the code of a computer program. The Supreme Court also noted recently that a breach of contract claim does not raise similar concerns to that of a use restriction that is enforced through IP law.\textsuperscript{356}

Blocking Universal’s contractual claim does not make economic sense and seems inequitable. By modifying Universal’s code, MSE saved considerable costs. Therefore, a prohibition on adaptation by third parties could have provided Universal with a powerful advantage and leverage in bidding for the second phase of the programming project. The Second Circuit should have assessed whether the parties meant to give Universal this advantage, which is a standard inquiry for courts when interpreting a contract.\textsuperscript{357} If the court had concluded that the parties meant to provide Universal with such an advantage, it would have been grossly unfair to deny it that benefit. No principle of copyright law or policy could justify such a result.

Those criticisms aside, the Second Circuit’s opinion is promising. It shows how, if and when the Vernor-MDY framework is rejected, courts around the nation would be able to apply the essential step defense effectively to block, as a matter of copyright law, certain undesirable use restrictions.

\textbf{D. APPLYING THE COMMERCIAL LAW APPROACH}

This Section applies the commercial law approach, which was introduced in Section A, to several common or controversial use restrictions. It further demonstrates how that approach balances the interests of copyright owners and their users, by properly restricting the ability of the former to customize copyright law to impose idiosyncratic restrictions on their consumers.

\textsuperscript{355} Rub, supra note 27, at 1145–47.

\textsuperscript{356} Lexmark, 137 S. Ct. at 1535 (stating in passing that while Lexmark does not have a cause of action under patent law, “the only recourse . . . is through contract law”); see also Gomulkiewicz, supra note 25, at 451 (“On five separate occasions, Chief Justice Roberts’s opinion mentions that conditions on end-user purchasers are a matter of contractual arrangements and contract remedies.”).


We start with the provision that was considered in MDY—a prohibition on running bots. Under the commercial law approach, Blizzard would not have had a cause of action in copyright law. Users of World of Warcraft purchased permanent possession of their copies and were therefore their owners. They were thus allowed to create temporary RAM copies per the essential step defense. As such, regardless of the license agreement’s language, the users’ actions would not have been an infringement of copyright. If the users were not infringing, MDY could not have been held liable for secondary copyright liability.358

2. Early Sales

In a famous and complex early case, a publisher promised the copyright owner not to distribute a paperback version of The Hunt for Red October before October 15, 1985, but did it nevertheless.359 Because distribution is an exclusive right, the publisher’s activities needed to be covered by a license. As this was a negotiated contract, the parties could have written it in a way that would or would not provide a cause of action in copyright. For example, if the parties stated that the license was valid starting October 15, then any prior distribution would be infringing. If they stated that the license would start on an earlier day but would be conditioned on no sale before October 15, then the first early sale would have suspended the license, and the second sale would be infringing. If they provided that the license was effective as of September, but the publisher promises not to sell it before October 15—which was the case with The Hunt for Red October—then a copyright cause of action is precluded.360

3. No Modification, No Derivative Work, or No Citation

Subject to the defenses to copyright infringement, copyright owners have an exclusive right to control the creation of derivative works.361 However, a prohibition on the preparation of derivative works (as well as the reproduction of substantially similar work) is limited by the fair use defense.362 Deciding whether a follow-up work is fair use is a complex question, which is beyond the scope of this work.363 However, that is a question of copyright law

358. Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1168–70 (9th Cir. 2007).
360. Id. at 695.
362. Id. § 107.
363. See, e.g., Google LLC. v. Oracle Am., Inc., 141 S. Ct. 1183, 1209 (2021) (holding Google’s reproduction of elements of Oracle’s Java code as fair use); Andy Warhol Found. for Visual Arts, Inc. v. Goldsmith, 11 F.4th 26, 32 (2d Cir. 2021) (holding that Andy Warhol’s reproduction of Goldsmith’s photographs was infringing).
that is mostly unaffected by the content of license agreements.\textsuperscript{364} Use that is considered fair by copyright law will not give rise to liability under copyright law, regardless of any contractual limitation that the user accepted.

On top of fair use, modification of software can also be shielded by the essential step defense. Programmers commonly modify software for their needs. Those actions fall under the essential step defense if they are “an essential step in the utilization of the computer program.”\textsuperscript{365} It is, therefore, likely that minor modifications that help with the smooth or efficient work of the program will be considered essential, as the Second Circuit recently held.\textsuperscript{366} On the other hand, significant modifications, such as the creation of a new program, will likely fall outside the scope of the defense.

4. No Criticism or No Disparagement

A copyright owner might distribute a work with a license that requires the users to promise not to criticize it or not to disparage the copyright owner. The breach of such a provision would not give rise to a cause of action under copyright law because users can engage with the work (e.g., read the book, watch the movie, or play the video game) without a license.\textsuperscript{367}

The case might be more complex when a copyright owner tries to restrict future creators. Goldman Sachs, for example, recently created a new font and allowed anyone to use it, provided that the use does not disparage the company.\textsuperscript{368} Under the commercial law approach, when users utilize the font in a way that disparages Goldman Sachs, their license expires. The question of whether their use is infringing depends on whether it is considered fair under the fair use doctrine. It probably is. The Copyright Act lists “criticism” as use that is typically fair.\textsuperscript{369} The Supreme Court stated that the fair use doctrine is a built-in safeguard within copyright law to protect free speech.\textsuperscript{370}

\textsuperscript{364} Licenses can somewhat affect the fair use determination, although only in a partial and indirect way. The existence of a licensing market is one factor in the fair use analysis because it might indicate that the defendant’s use caused more harm to the plaintiff as it denied it potential licensing fees. Am. Geophysical Union v. Texaco Inc., 60 F.3d 913, 929–30 (2d Cir. 1994); Andy Warhol Found. for Visual Arts, 11 F.4th at 48–51. A full analysis of this factor within the fair use jurisprudence is beyond the scope of this Article.

\textsuperscript{365} 17 U.S.C. § 117(a)(1).

\textsuperscript{366} Universal Instruments Corp. v. Micro Sys. Eng’g, Inc., 924 F.3d 32, 43 (2d Cir. 2019).

\textsuperscript{367} The enforceability of such provisions is highly questionable even as a matter of contract law, as they seem to be against public policy and possibly unconscionable. See generally Alan E. Garfield, Promises of Silence: Contract Law and Freedom of Speech, 83 CORNELL L. REV. 261 (1998) (discussing the enforceability of such agreements as a matter of contract law); David A. Hoffman & Erik Lampmann, Hushing Contracts, 97 WASH. U. L. REV. 165 (2019) (same). This is a complex question that is beyond the scope of this Article.

\textsuperscript{368} Wagner & Stein, supra note 3. This provision was later removed from Goldman Sachs’ license.

\textsuperscript{369} 17 U.S.C. § 107.


5. Copyleft Licenses

As mentioned,\footnote{See supra text accompanying notes 10–11.} copyleft licenses are aimed to increase access to a work. Those licenses grant users broad rights but require them to distribute the work, and any modification thereof, under a similar license, thus guaranteeing broad access.\footnote{See Jacobsen v. Katzer, 535 F.3d 1373, 1378–79 (Fed. Cir. 2008).} The most important copyleft licenses are open-source software licenses. It is, however, unclear if the violation of those licenses meets the Ninth Circuit’s nexus requirement and thus triggers copyright liability.\footnote{This concern was raised by multiple commentators. See, e.g., Ard, supra note 25, at 349–52; Gomulkiewicz, supra note 202, at 110–11; Mulligan, supra note 25, at 1111–12.} Indeed, it is not clear whether a promise to include the source code with any downstream distribution of software has a nexus to copyright.\footnote{See Jacobsen, 535 F.3d at 1378, 1382–83 (holding, in a decision that predated MDY, that a violation of such a provision in a copyleft constitutes copyright infringement).}

The commercial law approach offers clearer answers. The question is not whether a nexus exists but whether the user’s actions, and in particular the adaptation of the original code, are covered by any of the statutory defenses to copyright infringement. Assuming that the modification of the software is significant, the essential step defense is inapplicable. Deciding whether a modification of software is fair use is a more complex question, but, as a general matter, when a for-profit company embodies existing software within its own program, it likely (although not always) exceeds the scope of the fair use defense.\footnote{But see Google LLC v. Oracle Am., Inc., 141 S. Ct. 1185, 1209 (2021) (holding that Google’s for-profit unlicensed use of allegedly protected elements of Oracle’s computer program is fair use).} In such a case, the adaptation needs to be covered by a license or else be considered infringing.

Consider, for example, the most important copyleft license: GNU General Public License.\footnote{GNU General Public License, GNU (Nov. 10, 2020, 9:58 AM), https://www.gnu.org/licenses/gpl-3.0.html [http://perma.cc/R76K-M6G9].} Section Two of that agreement grants the user a broad license to reproduce, modify, and distribute the work “provided that you comply with the terms of this License” and states that distribution “is permitted solely under the conditions stated below.”\footnote{Id.} Section Six of that
agreement states that users can distribute a modification of the software “provided that” they make the source code available too. The language in sections Two and Six makes it clear that making the source code available is a condition for the license. This means that the distribution of modified work without making the source code available will not just be a breach of the license agreement but also a failure of a condition. Under those circumstances, unless that use is considered fair—and it typically is not—the user will be subject to liability under copyright law.

6. The Limitations of the Essential Step Defense

The commercial law approach relies, to a degree, on the essential step defense, which will be reinstalled and at full strength once the Vernor-MDY framework is rejected. That defense, however, was designed by CONTU in the late 1970s and enacted by Congress in 1980. It might, therefore, not be perfectly suitable for modern technology, the type of which was barely imaginable in the 1970s.

The essential step defense can probably operate appropriately with some modern technologies. For example, while CONTU had software in mind when the enactment of the essential step defense was proposed, it probably can tackle modern digital works, such as eBooks, digital images, and digital music, quite well. Much like software, when a computer uses digital works, meaning presents an image on the screen or plays music through its speakers, it copies the digital file to its RAM. However, the creation of that copy is likely shielded by the essential step defense. The essential step defense applies to “computer programs,” which the Copyright Act defines as “a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.” That definition nicely describes digital works that are merely binary files that instruct the computer to take a certain action, such as present an image or play music.

This approach is not just consistent with the text of the Act, but it is also supported by the rationale of the defense as expressed by CONTU. Indeed, CONTU explained that the defense is needed because distributors of copyrighted goods “intend that they be used by their customers, so that rightful users would but rarely need a legal shield against potential copyright problems.”

However, with the developments in modern technology, the scope of the exclusive right of reproduction, especially in the context of temporary RAM

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379. See supra note 334.
380. See supra text accompanying notes 142–45.
382. Id. § 101.
383. See supra note 334.
copies, might outgrow the essential step defense. For example, consider server-side software and digital goods where the users’ computers run the software and use digital goods stored on a server. I will leave the full analysis of the legal implications of such use to future work but will note that such an assessment might not be trivial, partly because technologies differ in how they create temporary copies and where they store them. The essential step defense applies only to the creation of copies of software and digital goods that are embodied on a medium that the user owns, and thus its applicability to server-side software is unclear. If there is a gap in the scope of the essential step defense—in other words, if the creation of temporary copies while accessing a work is considered a reproduction that is not covered by the essential step defense—then the users might again be at the mercy of the copyright owners’ licenses.

There are multiple ways to approach such a gap, if indeed it exists. For example, courts can interpret the essential step defense broadly, partly relying on the rationale provided by CONTU. Courts could also rely on the fair use doctrine—an option recently mentioned (but not decided on) by the Ninth Circuit. Indeed, historically, the fair use defense allowed copyright law “to

384. This phenomenon is not unique to the essential step defense. The Copyright Act of 1976 created broad exclusive rights and balanced their extended scope by enacting a host of specific narrow-tailored defenses. The problem is that it is easy to interpret the broad language of the exclusive rights to cover changes in technology, while the narrowly tailored defenses might become obsolete. As a result, the scope of the exclusive right might naturally broaden over time. See Annemarie Bridy, Aereo: From Working Around Copyright to Thinking Inside the (Cable) Box, 2015 MICH. ST. L. REV. 465, 473–74 (discussing that the “copyright system . . . hardwire[d] a lack of balance between rights and exceptions—giving a broad, technology-neutral scope to the former and a narrow, technology-specific scope to the latter”).

385. Examples of such technology are plentiful nowadays. Streamed movies and music are typically permanently stored on a server. Files in the cloud are also saved on multiple servers. Remote software, such as many Microsoft Office products, are similarly stored and run on a server.

386. For example, consider Disney Plus’s Subscriber Agreement, which notifies users that “as a condition of your license, you may not . . . share your login credentials with third parties.” Legal: Subscriber Agreement, DISNEY+ (Oct. 1, 2020), https://www.disneyplus.com/legal/subscriber-agreement [https://perma.cc/2GDV-VWHQ]. Disney Plus is a streaming service, which likely does not create temporary copies of meaningful parts of the streamed movie that are considered a reproduction thereof. See Cartoon Network LP, LLLP v. CSC Holdings, Inc., 536 F.3d 121, 127–33 (2d Cir. 2008); Capitol Recs. v. Escape Media Grp., Inc., No. 12-CV-06646, 2014 WL 12698683, at *21 (S.D.N.Y. May 28, 2014). As a result, a user likely does not need a license to stream a movie and therefore transferring the login information to a third party, while breaching the subscriber agreement, should not result in copyright liability. But other technologies might create copies that could be considered reproduction. If, for example, Disney Plus would have created long-term server-side copies of streamed movies, the analysis would have been different.

387. The application of the CONTU rationale for the enactment of the essential step defense might be challenging because the version that was eventually enacted by Congress was not identical to the one proposed by CONTU. Congress never explained the deviation and courts struggle to interpret it. See, e.g., Krause v. Titleserv, Inc., 402 F.3d 119, 122 (2d Cir. 2005) (“The legislative history of § 117(a) is sparse and provides limited guidance on this point.”).

388. CDK Glob. LLC v. Benovich, No. 20-16469, 2021 WL 4944824, at *5 (9th Cir. Oct. 25, 2021) (noting that the creation of temporary copies by a certain server-side software might be fair use).
address questions posed by new technologies or other developments that the legislature could not or did not contemplate.\textsuperscript{389}

While courts might be able to provide ad-hoc solutions to the server-side software problem (and they should if and when it arises), the discussion in this subsection suggests that the RAM copy problem likely needs to be addressed more directly. As Section III.B explained, much of the problem of copyright customization is rooted in the notion that creating temporary RAM copies—that are created and quickly deleted as a side effect of accessing software and digital goods—is considered reproduction under the Copyright Act. That notion—which is well established, especially within the Ninth Circuit\textsuperscript{390}—places a heavy burden on the copyright defenses to prevent users from being considered infringers for just using the product they paid to access (which is exactly the concern that CONTU raised). When those defenses fail, copyright owners of software can control their users unlike any other copyright owners.

While a full analysis of the RAM copy problem is beyond this work’s scope, it is quite doubtful that it promotes copyright policy. The few courts that refuse to fully embrace the Ninth Circuit’s perception of RAM copies, including the Second Circuit, demonstrate that the Copyright Act does not necessarily dictate this approach.\textsuperscript{391} The recent willingness of one Ninth Circuit panel to limit the court’s RAM copy jurisprudence (in a case partly concerning server-side software),\textsuperscript{392} if followed by the court, holds a great promise of tackling the customization problem at its root.

Indeed, this Part offers an approach that is significantly superior to the failed Vernor-MDY framework without undermining the Ninth Circuit’s well-established precedents concerning RAM copies. However, additional developments in technology might require courts and Congress to reexamine those precedents in order to prevent unmitigated copyright customization.

\section*{VI. Conclusions}

While copyright owners often desire to customize copyright law in order to effectively limit their customers, some of those limitations should, at most, be actionable under contract law and be subjected to its limited enforcement tools and remedies. Unfortunately, the leading framework to police those use

\textsuperscript{389} Samuelson, supra note 371, at 2602; see also H.R. REP. NO. 94-1476, at 66 (1976) (explaining that the scope of fair use should not be frozen "especially during a period of rapid technological change" and that "courts must be free to adapt the doctrine"); Sag, supra note 371, at 411 (noting that "[t]he role of fair use is especially significant given the impact of new technology on copyright").

\textsuperscript{390} See supra text accompanying notes 138–41.

\textsuperscript{391} Cartoon Network, 536 F.3d at 127–29 (holding that when a RAM copy is stored for only a "transitory duration" it is not considered reproduction under the Copyright Act).

\textsuperscript{392} CDK Glob., 2021 WL 4944824, at *5–6; see also supra note 138 (discussing that decision).
restrictions, especially in the context of software licenses, is hopelessly flawed, and it allows copyright owners to exercise too much control over their purchasers and users.

The Article explains that that framework should be abandoned and replaced with a superior approach. That approach is consistent with core notions of commercial law, with the spirit of recent Supreme Court precedents, and with sound copyright policy.