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## ON ENFORCING VIRAL TERMS

### I. INTRODUCTION

“Viral” terms in licenses and contracts purport to create rights and duties for parties other than the signatories. For instance, the General Public License (GPL) version 2, under which much free and open source software is distributed, purports to prevent downstream users of the licensed software from selling it, or any derivative works they create from it, for profit.<sup>1</sup> So for example, the developer of such software claims the right to directly sue *any* user who violates these terms, regardless of how she obtained the software (whether directly from the developer or from some third party). This Note discusses whether viral terms should be directly enforceable against downstream users, and if so, when.

Courts and commentators confronting this question have made a startling assumption. They have assumed that the enforceability of viral terms must turn on whether the terms are best classified as contractual provisions or as valid conditions on some underlying intellectual property (IP) right. If the terms are seen as contractual, they are considered unenforceable against downstream users absent privity of contract, but if they are seen as IP rights, they are considered enforceable.<sup>2</sup> This Note argues that this assumption and the classification-based rule for enforcing viral terms that it creates are unjustified.

Part II explains that enforceable viral terms are necessary to allow certain kinds of business models to flourish. Part III then argues that it is not appropriate to view viral terms through the lenses of “contract” and “property.” Comparing the economic properties of viral terms against the economic purposes of these legal archetypes reveals a double mismatch. First, neither the contract nor the property paradigm (nor both together) can accomplish the primary *purposes* of viral terms. Business methods that rely on viral terms require that such

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<sup>1</sup> See Free Software Found., Inc., GNU General Public License § 6 (version 2, June 1991), <http://www.gnu.org/licenses/old-licenses/gpl-2.0.html> (“[When] you redistribute the Program (or any work based on the Program), . . . [y]ou may not impose any further restrictions on the recipients’ exercise of the rights granted herein.” (emphasis added)).

<sup>2</sup> See, e.g., *Jacobsen v. Katzer*, 535 F.3d 1373, 1380 (Fed. Cir. 2008) (“The heart of the argument [about whether viral terms analogous to those in the GPL are enforceable] concerns whether the terms . . . are conditions of, or merely covenants to, the copyright license.”); *Monsanto Co. v. McFarling*, 302 F.3d 1291, 1298–99 (Fed. Cir. 2002) (allowing restrictions on use of patented seeds to run to new seeds produced by crops grown from original seeds, on the ground that the restriction was a permissible condition on the original license); Niva Elkin-Koren, *What Contracts Cannot Do: The Limits of Private Ordering in Facilitating a Creative Commons*, 74 *FORDHAM L. REV.* 375, 403–07 (2005) (assuming that under the standard legal analysis, viral terms would be enforceable only if they were expressions of an underlying property right).

terms be more widely enforceable than contract rights and more customizable than property rights. Second, the paradigms cannot tackle the primary potential *dangers* of viral terms. Widely enforceable and freely customizable terms can create crippling information cost externalities, and neither paradigm is set up to deal with this problem.

Part IV argues that the classification-based enforcement rule, with its focus on the presence or absence of an underlying IP right, has perverse economic consequences when applied to viral terms. Economic analysis of the information cost danger reveals the classification-based rule to be both under- and overinclusive. The presence of an IP right is at best irrelevant to the economic costs and benefits of enforcement; at worst, it might actually cut *against* enforceability. Therefore, the enforcement of viral terms should not depend on whether they are treated as “property” or “contract,” but should instead be governed by a distinct enforcement rule that directly addresses the potential information costs involved.

Parts V and VI discuss what that new rule should be. Part V considers two traditional mechanisms for addressing third-party information costs — registration and notice. It argues that, although they effectively reduce information cost externalities in other contexts, these mechanisms are impractical and ineffective where viral terms are concerned. Viral terms attach to constantly changing electronic products, which no registry can adequately index, and notices of viral terms attached to products can be stripped out by downstream intermediaries.

Part VI therefore proposes a novel rule for enforcing viral terms. In trademark dilution law, marks are eligible for protection only if their owners have succeeded in making them “famous” in the relevant marketplace. This Note proposes that the owners of viral terms should similarly *earn* the right to have their terms enforced. As with trademarks, viral terms would qualify for enforcement only upon proof that their existence and import were widely known to those likely to be bound by them. So the GPL terms described above, for instance, would be enforceable only if it could be shown that most people who distribute and modify free software were aware of their existence and of their essential requirements. This approach imposes no a priori constraints on what viral terms can be enforced, and it reduces information cost externalities by forcing rights holders to internalize the information costs that arise from their terms. Rights holders thus would have incentives to keep terms simple and to publicize them. And in the vast majority of cases, downstream users would be bound only by terms they knew about beforehand. Part VII concludes.

## II. THE NEED FOR ENFORCEABLE VIRAL TERMS

An initial question is whether viral terms should *ever* be enforced against downstream users. This Part argues that the benefits of doing

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so are very high. It argues that the internet has enabled a new form of relationship between parties; that this in turn has made possible a whole class of valuable new business methods; and that enforceable viral terms are essential to the viability of many of these methods.

The internet has created the technical infrastructure to support potentially potent new ways of producing and disseminating information goods. By dramatically lowering communication costs,<sup>3</sup> it has made possible a new type of business relationship, which this Note calls the “viral relationship.” A viral relationship is one that spreads out from an initial set of parties to an indeterminate number of others, and leverages private information encoded in existing relationships as it propagates. For instance, it may spread when existing parties, consulting private knowledge of their friends’ preferences, reach out to those who would like to take part and invite them to join also.

But the technical infrastructure that the internet provides is not enough by itself. A technical infrastructure can make viral relationships possible, but for large-scale viral business methods to arise, a complementary legal infrastructure is required. Because viral relationships run to many unknown parties, businesses will often need some way to enforce terms against remote parties if they are to extract value from these relationships. In other words, viral business methods cannot reach their full potential without enforceable viral terms. The rest of this Part consists of three examples of the existing technical infrastructure for viral relationships that demonstrate the need for a complementary legal infrastructure that enforces viral terms.

#### A. *Peer Production of Software*

Peer production of software is perhaps the most important example of a viral business method made possible by the internet. By reducing communication costs “to a level close to zero,”<sup>4</sup> the internet has made it possible to build software in a decentralized fashion. Programmers from all over the world invest effort in collaborative software projects, the results of which are made freely available.<sup>5</sup> Users can obtain the software without cost, and they are generally free to use it and modify it as they like. Their modifications are then contributed back to the common pool. Because users adapt the software to meet their real-world needs, this continuous process of iterative refinement is guided by users’ private information about the environments the software will actually face. As a result, when a large fraction of users are techni-

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<sup>3</sup> See John Quiggin & Dan Hunter, *Money Ruins Everything*, 30 HASTINGS COMM. & ENT. L.J. 203, 237 (2008).

<sup>4</sup> *Id.*

<sup>5</sup> See YOCHAI BENKLER, *THE WEALTH OF NETWORKS: HOW SOCIAL PRODUCTION TRANSFORMS MARKETS AND FREEDOM* 60 (2006).

cally sophisticated and able to make the necessary adaptations, decentralized production often outperforms traditional centralized production.<sup>6</sup> Many critical software components have been developed by this method, and in many cases they outperform their firm-created competitors. For instance, the most widely used commercial web server was developed this way,<sup>7</sup> as was an advanced operating system.<sup>8</sup>

A viral relationship between software developers has thus created the potential for an iterative, decentralized new form of software development. But to reach its potential, this relationship needs a legal infrastructure that incorporates two factors. First, anybody who modifies the software must be required to return her modifications to the common pool. Second, anybody who obtains the software must be prohibited from charging others for it. If these conditions are not enforceable, free rider problems arise that might drive many nonaltruistic developers from the field.<sup>9</sup> Each user would have the incentive to keep her own modifications secret to obtain an advantage over her competitors, or else to sell them for a profit. This would break the viral development cycle, which relies on private parties to adapt the software to real-world conditions and then share their improvements.

Many distributed software-creation groups have long purported to impose these conditions on downstream users through “viral licenses.” The Free Software Foundation (FSF), for instance, licenses most of its software under a version of the GPL that purports both to prevent downstream users from selling the software for profit, and to require that any new software that derives from that software *also* be licensed under the GPL (and thereby returned to the public domain).<sup>10</sup> Licenses used by other free software groups contain similar viral terms.<sup>11</sup>

Yet, until very recently, there was serious doubt about the enforceability of these license terms against downstream users. Some scholars, such as Professor Robert Merges, opined that they “seem[ed] unenforceable;”<sup>12</sup> others expressed uncertainty on the ques-

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<sup>6</sup> See *id.* at 64.

<sup>7</sup> See *id.* (Apache).

<sup>8</sup> *Id.* (Linux).

<sup>9</sup> But see *id.* at 91–99 (suggesting that many developers might have primarily noneconomic motivations and might therefore be altruistic).

<sup>10</sup> See Free Software Found., Inc., *supra* note 1, at § 6.

<sup>11</sup> An example is the Creative Commons ShareAlike license. See Creative Commons, Attribution-ShareAlike 3.0 Unported, <http://creativecommons.org/licenses/by-sa/3.0/legalcode> (last visited May 15, 2009). Others are listed on the FSF webpage. See Free Software Found., Inc., Licenses, <http://www.fsf.org/licensing/licenses/> (last visited May 15, 2009).

<sup>12</sup> Robert P. Merges, *The End of Friction? Property Rights and Contract in the “Newtonian” World of On-Line Commerce*, 12 BERKELEY TECH. L.J. 115, 129 (1997).

tion,<sup>13</sup> and still others predicted that they would prove enforceable.<sup>14</sup> Recently, in *Jacobsen v. Katzer*,<sup>15</sup> the Federal Circuit, applying a classification-based approach to the enforceability question,<sup>16</sup> found that a very similar term was a valid extension of an underlying property (specifically, copyright) right, and was therefore enforceable.<sup>17</sup>

Proponents of peer-produced software have hailed *Katzer* as a “very important victory” for the field.<sup>18</sup> Without *Katzer*, the conditions that made such business models possible in the absence of clearly enforceable viral terms would not have lasted forever, nor would they have scaled as the free software development community grew.<sup>19</sup>

### B. Viral Marketing

A second example of existing viral relationships is “viral marketing,” a powerful internet marketing technique. It uses preexisting social networks to spread an advertising message cheaply,<sup>20</sup> and to target it precisely at those who will find it most appealing. A viral marketer couches her message in some entertaining form and introduces it into

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<sup>13</sup> See, e.g., Elkin-Koren, *supra* note 2, at 404–07 (indicating that it is unclear whether the standard legal analysis would treat such terms as expressions of a property right, and hence enforceable, or as expressions of a contractual right, and hence unenforceable).

<sup>14</sup> E.g., Eben Moglen, *Enforcing the GNU GPL* (Sept. 10, 2001), <http://www.gnu.org/philosophy/enforcing-gpl.html>.

<sup>15</sup> 535 F.3d 1373 (Fed. Cir. 2008).

<sup>16</sup> See *infra* Part IV, pp. 2195–200.

<sup>17</sup> See *Katzer*, 535 F.3d at 1382–83.

<sup>18</sup> Lessig 2.0, [http://lessig.org/blog/2008/08/huge\\_and\\_important\\_news\\_free\\_1.html](http://lessig.org/blog/2008/08/huge_and_important_news_free_1.html) (Aug. 13, 2008, 17:28).

<sup>19</sup> Three reasons explain the success of free software before *Katzer*. First, the strong possibility that the terms would eventually be found enforceable (ultimately borne out) might have dissuaded some potential violators. Second, the terms also constituted a strong norm in the development community, which partly compensated for the lack of legal enforceability. See *Merges, supra* note 12, at 129. Finally, the mere existence of the terms might have dissuaded some unsophisticated developers from violating them.

But these conditions would not have persisted forever. The possibility of enforceability clearly would not have survived the first case to hold the terms unenforceable. For instance, if *Katzer* had come out the other way, this reason would have ceased to apply. Turning to the next reason, the norm supporting the GPL's terms would likely have waned in intensity as the community grew in size, and reputational sanctions became harder to enforce. Cf. Lisa Bernstein, *Opting Out of the Legal System: Extralegal Contractual Relations in the Diamond Industry*, 21 J. LEGAL STUD. 115, 138–43 (1992) (indicating that the power of reputation-based sanctions generally varies inversely with the size and cohesiveness of the relevant community). Lastly, unsophisticated developers' ignorance of the law would not have lasted forever. As the other two reasons failed over time, more and more violations would almost certainly have occurred. Eventually, even the naïvest developer would have witnessed many of them. This would have corrected his ignorant belief in the terms' enforceability.

<sup>20</sup> Lisa P. Ramsey, *Intellectual Property Rights in Advertising*, 12 MICH. TELECOMM. & TECH. L. REV. 189, 243 (2006) (“[Viral marketing] involves creating an online message . . . [that spreads] across the Web like a virus at no cost to the advertiser.” (quoting Theresa Howard, *Viral Advertising Spreads Through Marketing Plans*, USA TODAY, June 23, 2005, at 6B, available at [http://www.usatoday.com/money/advertising/2005-06-22-viral-usat\\_x.htm](http://www.usatoday.com/money/advertising/2005-06-22-viral-usat_x.htm))).

the internet community at a few initial points.<sup>21</sup> Recipients who like it pass it along to others in their social circle who they know will like it too.<sup>22</sup> The cost of forwarding such messages on the internet is essentially zero. This is a cheap way to reach potential customers,<sup>23</sup> and may also be exceptionally accurate. It leverages recipients' knowledge of their friends' tastes to target the advertisement at those who will like it most and who are therefore most likely to be affected by it. No amount of ex ante research could accomplish this result.

Viral marketing has been successfully used in fields as diverse as fast food,<sup>24</sup> software,<sup>25</sup> automobiles,<sup>26</sup> film,<sup>27</sup> and music,<sup>28</sup> and is expected to grow further in the next few years.<sup>29</sup> Despite its initial success, viral marketing may not be achieving its full potential for want of a supporting legal infrastructure. Ideally, viral marketers would want to allow recipients to use their advertisements freely, subject only to a few simple conditions, such as not removing the advertiser's logo. For instance, they might want to encourage users to build on the advertisements and to create derivative works and spinoffs. Both users and marketers would benefit: users because they would get new tools and raw materials to work with, and marketers because such uses would enhance the visibility of the advertisement. Viral marketing today only leverages private information to target a static ad. The ideal form of viral marketing would also leverage private creativity to dynamically *adapt* the ad to the tastes of still other customers.

Because viral terms are presently only imperfectly enforceable (see Part III), ideal viral marketing is not possible. Since it is unclear whether marketers can enforce critical conditions — such as retention

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<sup>21</sup> See, e.g., Theresa Howard, *'Viral' Ads Are So Fun You Pass 'Em Along*, USA TODAY, May 20, 2005, at 1B, available at [http://www.usatoday.com/money/advertising/2005-05-19-viral-usat\\_x.htm](http://www.usatoday.com/money/advertising/2005-05-19-viral-usat_x.htm).

<sup>22</sup> See *id.*

<sup>23</sup> *Id.*

<sup>24</sup> *Id.* (describing successful viral marketing campaigns by Burger King); Howard, *supra* note 20 (describing a viral campaign by Long John Silver's).

<sup>25</sup> Howard, *supra* note 20 (describing Microsoft's successful viral advertising campaign for the game *Halo 2*).

<sup>26</sup> *Id.* (describing a viral campaign run by Volvo); Stephanie Kang, *BMW Ran Risk with Silent Role in Mockumentary*, WALL ST. J., June 20, 2008, at B5 (describing a campaign run by BMW).

<sup>27</sup> Chris Lee, *Bat Infiltration*, L.A. TIMES, Mar. 24, 2008, at E1 (describing a viral campaign for the movie *The Dark Knight*).

<sup>28</sup> Edna Gunderson, *Reznor Nails Big 'Zero' on the Future*, USA TODAY, Apr. 19, 2007, at 1D (describing a viral campaign by the band Nine Inch Nails).

<sup>29</sup> Daniel Terdiman, *Marketers Feverish over Viral Ads*, WIRED, Mar. 22, 2005, <http://www.wired.com/techbiz/media/news/2005/03/66960> (“[M]arketers of all kinds have been increasingly looking for ways to take advantage of the speed at which information moves today and the power that can come from people passing on their impressions, recommendations or referrals of products or services.”).

of their trademarks — against downstream parties, they have to resort to *technical* means of enforcement. Specifically, most viral campaigns retain control by keeping the advertisement itself at a controlled central location (such as a website) and only allowing links to that site to propagate in the community. This strategy means that downstream parties are not allowed to build on the advertisement or to incorporate it directly into their blogs, social networking profiles, or other online works. They lose the surplus they would get from having this material to work with, and marketers lose the surplus that would have been generated by private creativity. Society suffers heavy frustration costs from not enforcing the necessary viral terms.

### C. *Peer Review and Comment*

A final example of the viral relationship, academic peer review and commenting, predates the internet in a primitive form. However, this relationship has the potential to support much more valuable business methods in the networked environment. Professors often send their papers to colleagues for comment before publication. The recipients might in turn forward the work to others whom they know to be interested in or knowledgeable about the topic. Thus, this scheme operates virally: it leverages private information encoded in existing relationships. Of course, the academic community in most fields is small, so the material probably does not propagate many times. Nevertheless, anecdotal evidence suggests that even this limited form of peer review is useful in refining arguments and improving articles.

Because peer review and comment is so valuable, it might seem surprising that the method was not immediately extended to larger, nonacademic communities as soon as the internet's low transmission costs made that possible. Every entity that makes money by generating non-secret ideas could potentially benefit from this process. One reason that this potential source of value has not been exploited might be the lack of a legal infrastructure that enforces viral terms. This form of information propagation is possible only on the condition that recipients do not steal the authors' ideas — for example, in the academic context, by publishing them first. In the small academic community, this viral rule is enforced by a strong social norm, allowing the system to function productively. In larger communities, legal enforceability of viral terms would be needed to ensure that recipients did not appropriate the value of a circulating idea before the originator has had a chance to make use of it.

## III. PROPERTY AND CONTRACT AS INAPPROPRIATE MODELS

This Part compares the economics of viral terms with the purposes served by contract and property, and demonstrates that there exists a

double mismatch between the two. Section A argues that property and contract were chosen specifically to *avoid* a legal regime of resource-control rights that was simultaneously flexible and widely enforceable. However, as section B explains, viral terms need to have both of these properties if they are to support viral business methods. Thus, treating viral terms as contract or property, or as sometimes one and sometimes the other, defeats the purposes that these terms should serve. What is more, enforceable viral terms raise potential dangers — of crippling third-party information cost externalities — that neither paradigm is designed to handle. Accordingly, the enforcement of viral terms calls for a new regime that is situated in the conceptual gray area between property and contract and that tackles the information cost problem head-on.

### A. *The Economics of Property and Contract Rights*

Professors Thomas W. Merrill and Henry E. Smith have put forward an elegant account of the legal forms of property and contract,<sup>30</sup> showing that they were chosen specifically to *avoid* rights that were simultaneously customizable and enforceable against multiple unknown parties. Such rights can create potentially crippling information costs for third parties, who are then bound by nonstandard terms they may never have seen.

Private control of resources is economically valuable precisely to the extent that it aligns private and social incentives to use, develop, and trade resources.<sup>31</sup> To align incentives to use and develop resources, controllers must be appointed for resources and made to internalize the costs and benefits of the uses to which they are put.<sup>32</sup> And to facilitate the redistribution of resources to their most productive uses, controllers must be allowed to trade their rights of control and use.<sup>33</sup>

Merrill and Smith's first insight is that, although every legal regime for implementing private resource control requires some flexible rights and some widely enforceable ones, combining both into the same right has potentially disastrous consequences. Flexibility is needed so that

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<sup>30</sup> See generally Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 YALE L.J. 1 (2000) [hereinafter *Optimal Standardization*]; Thomas W. Merrill & Henry E. Smith, *The Property/Contract Interface*, 101 COLUM. L. REV. 773 (2001).

<sup>31</sup> See STEVEN SHAVELL, FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW 12–20 (2004) (explaining how private resource control can be a solution to the Tragedy of the Commons).

<sup>32</sup> *Id.*; cf. Merrill & Smith, *The Property/Contract Interface*, *supra* note 30, at 791 (describing “[e]xclusion strategies” of resource control).

<sup>33</sup> See SHAVELL, *supra* note 31, at 18 (“[I]f only possessory rights exist, optimality will not be achieved because things that exist will not be traded.”).



controllers can put resources to their most productive uses.<sup>34</sup> Society loses when inflexible rules “prevent . . . parties from achieving a legitimate goal cost-effectively.”<sup>35</sup> Rights must also be widely enforceable, so that controllers can internalize the benefits that flow from the uses to which the resources are put. When a controller’s rights are not enforceable against the world, parties not affected by them could seize some part of the value the controller creates, leaving her with suboptimal incentives to use and improve the resource efficiently.<sup>36</sup>

But if wide enforceability and flexibility are combined in a single rule, the combination could allow controllers to externalize some of the costs of their actions.<sup>37</sup> Specifically, they could create large information cost externalities.<sup>38</sup> The more widely a right is enforced, the more people it affects. In order to avoid infringing that right, each person affected has to learn first of the right’s existence and then of its substance. The cost of learning of such a right’s existence must be borne not only by those to whom it applies, but also by those to whom it *might* apply.<sup>39</sup> The cost of learning its substance need only be borne by those to whom it applies, but the more flexible the right is, the higher this cost is. Thus, widely enforceable rights create potentially crippling third-party costs unless they are few in number, known to exist, and well understood. Allowing them to be flexible also makes it much harder to avoid crippling costs.

Merrill and Smith’s second insight is that our legal regime has resolved the tension between the need for, and the dangers of, flexibility plus wide enforceability by splitting the resource-control regime in

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<sup>34</sup> An example might help. Suppose that A owns Whiteacre, a property that contains both valuable underground iron ore reserves and valuable farming land. To use Whiteacre efficiently, A should separate the right to exploit its ore reserves from the right to exploit its soil, and convey the first to a miner and the second to a farmer. But A can only do so if the legal rule is flexible enough to allow for this form of division. If the division is not legally enforceable, then A would be forced to put Whiteacre to a suboptimal use.

<sup>35</sup> Merrill & Smith, *Optimal Standardization*, *supra* note 30, at 35.

<sup>36</sup> Another example might help. Suppose that A owns Blackacre, a wooded plot, but does not have a right to exclude B from using it. B then has the ability and the incentive to cut down the trees there for her own profit. Thus, B seizes some of the value of Blackacre from A, leaving A with suboptimal incentives to invest in and utilize it efficiently.

It is also worth remarking that widely enforceable rights cannot simply be simulated by the use of multiple narrowly enforceable rights — not even if the latter are flexible and tradable. *See* Merrill & Smith, *The Property/Contract Interface*, *supra* note 30, at 793–94. The transaction costs of trying to perform this simulation would be prohibitive in any reasonably sized community. For example, suppose A were to try to achieve exclusive control over Blackacre by means of bilateral contracts. She could only do so by contracting with every person in the world to stay off Blackacre. Clearly, this is not a feasible way to internalize resource-use benefits.

<sup>37</sup> *See* Merrill & Smith, *Optimal Standardization*, *supra* note 30, at 25–26.

<sup>38</sup> *Id.*; Merrill & Smith, *The Property/Contract Interface*, *supra* note 30, at 793.

<sup>39</sup> *Cf.* Merrill & Smith, *Optimal Standardization*, *supra* note 30, at 28 (“Our [information cost-based] explanation [for the *numerus clausus* principle] . . . focuses on the effect of unusual property rights on other market participants . . . who fall outside the zone of privity.”).

two. It has created two legal forms of resource control: property and contract. Property rights are enforceable “against the world,” but they can take only a limited number of canonical forms.<sup>40</sup> Contract rights, on the other hand, are highly customizable,<sup>41</sup> but enforceable only against parties to the contract.<sup>42</sup> Taken together, these legal forms provide some measure of both flexibility and wide enforceability, yet neither creates crippling information cost externalities because neither is independently both flexible and widely enforceable.

*B. The Mismatch with the Economics of Viral Terms*

Although a regime of contract and property rights is adequate in many spheres, it can sometimes be inadequate. Some areas intrinsically must be governed by a single form of right that combines elements of both property and contract. Specifically, in contexts where the business relationship at issue is an “in rem” relationship,<sup>43</sup> meaning that it connects a rights holder with a large but indefinite class of other parties,<sup>44</sup> property-like wide enforceability of the right is needed.<sup>45</sup> And when the business method that builds on that relationship requires a high degree of customizability to be successful, that *same* right must also have contract-like flexibility. In such cases, a new right is required at the “property/contract interface,”<sup>46</sup> and other ways must be found to contain the information cost externalities that it creates.

For example, a creditor’s security interest in a debtor’s property has “in rem” effects on a large, indefinite class of other parties.<sup>47</sup> Among other things, the creditor receives a right of priority over the debtor’s tort creditors.<sup>48</sup> To the extent that such interests are enforced against these parties, the interests create large third-party information

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<sup>40</sup> In civil law countries, the principle forbidding creation of new forms of property rights is an explicit matter of statutory law, and goes by the name of the “*numerus clausus*” principle. Merrill & Smith, *Optimal Standardization*, *supra* note 30, at 4. In common law countries, the principle is nowhere explicitly recognized, *id.*, but is nevertheless *implicit* in the way courts operate. *Id.* at 10–11 (“[N]otwithstanding the absence of logical compulsion behind the *numerus clausus* in common-law systems, it is reasonably clear that common-law courts *behave* toward property rights very much like civil-law courts do: They treat previously-recognized forms of property as a closed list that can be modified only by the legislature.”).

<sup>41</sup> See Merrill & Smith, *The Property/Contract Interface*, *supra* note 30, at 776.

<sup>42</sup> See *id.* at 776–77.

<sup>43</sup> See *id.* at 809–10.

<sup>44</sup> The class of other parties is “indefinite” because their identities are not known *ex ante*.

<sup>45</sup> See Merrill & Smith, *The Property/Contract Interface*, *supra* note 30, at 809–10.

<sup>46</sup> See *generally id.*

<sup>47</sup> *Id.* at 836.

<sup>48</sup> *Id.* at 834.

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costs, which must be mitigated by the use of information cost-reducing strategies such as notice<sup>49</sup> and registration<sup>50</sup> requirements.

1. *The Need for Flexible and Widely Enforceable Viral Terms.* — The examples in Part II show that viral methods need a legal infrastructure that both permits customization and allows wide enforceability against multiple unknown parties. As for flexibility, each of the business models described requires a different viral term to be enforceable. Viral marketing needs to prohibit removal of trademarks; peer software development, to enforce return of modified works to the common pool; and peer review, to prohibit recipients from prematurely appropriating the value of ideas. What is more, viral business methods are still in the larval stage, and it is impossible to say today what viral terms will be needed in the future. Thus, a flexible legal infrastructure is required — one that does not impose a priori restrictions on the kinds of viral terms that can be enforced.

It is also essential that viral terms be widely enforceable. Viral business methods distribute information through ad hoc and uncontrollable distribution channels to potentially millions of internet users. Without the ability to enforce terms directly against downstream parties, many viral business methods simply would not be fully realizable. First, the ability to enforce terms only where there is privity of contract is insufficient to support such models. Suppose a business finds a downstream user violating one of its terms. To make that user pay without suing her directly, the business would have to set in motion a chain of suits that worked its way down the distribution chain until it reached that user. But given the long, ad hoc, and ever-shifting nature of viral distribution chains, this is not feasible. For one thing, it would probably be impossible to identify the distribution chain by which the offending user obtained the good. For another, even if the chain could be identified, there would still almost certainly be at least one unknown, unavailable, or judgment-proof party on the distribution path, ensuring that no sequence of suits could make the offending user pay.

Second, it would not be feasible to force all users to contract with the business directly. Many viral business methods require software to be distributed in easily modifiable and transferable forms. For example, peer production of software requires that users be able to obtain copies of software source code to adapt it to their needs. Once distributed in such a form, it is very difficult to prevent unauthorized redistribution to other users. But even if such control were technically possible, it could not be done without defeating many of the reasons for

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<sup>49</sup> See, e.g., *id.* at 842–43 (discussing a notice strategy for addressing the third-party information costs created by widely enforceable but flexible security interests).

<sup>50</sup> See, e.g., *id.* at 848 (giving an example of how registries could theoretically reduce third-party information costs in the context of real property).

using viral methods in the first place. For example, viral advertisers who try to force users to contact them directly (by keeping their ads at a central location only) do so at the cost of their ability to leverage private creativity to dynamically *adapt* the ad.<sup>51</sup>

2. *The Need for a New Legal Regime To Support Viral Business Methods.* — It follows that existing contract and property rights cannot adequately support viral business methods, and that the enforcement of viral terms calls for a new regime at the property/contract interface that is both somewhat flexible and somewhat widely enforceable. The critical question that remains is how to contain the information cost externalities that necessarily arise from such a regime. As Merrill and Smith predict, these externalities would be crippling if viral terms were allowed to be arbitrarily flexible and unlimitedly enforceable against downstream users.<sup>52</sup> Such users could be bound by terms they had never seen whenever they downloaded or used any material on the internet. Indeed, with unrestricted enforceability, they would even be bound when no notice of the terms had ever been affixed to the goods downloaded, or when notice originally affixed had since been stripped out by some upstream intermediary.

#### IV. THE CLASSIFICATION-BASED APPROACH

In practice, courts and commentators have generally applied a classification-based approach to the enforcement of viral terms.<sup>53</sup> They make enforceability turn on whether a term is best classified as a contractual provision or a valid condition on some underlying IP right.<sup>54</sup> If the term is classified as the former, it is not enforced against downstream users absent privity of contract; if as the latter, it is. Part III argues that “property” and “contract” are inappropriate lenses through which to view viral terms. This Part argues that the classification-based approach actually has perverse economic effects. The presence or absence of an underlying property right has little to do with the economic costs and benefits of enforcing viral terms; indeed, the little effect it does have cuts *against* enforceability.

Two very different justifications have been advanced for the classification-based approach. The first is a formal justification, which holds that the greater power to exclude from all uses given by the underlying IP right necessarily implies a lesser power to exclude conditionally. Section A argues that this justification elevates deference to the archetypal forms over economic substance. A second, more subtle

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<sup>51</sup> See *supra* section II.B, pp. 2188–90.

<sup>52</sup> See *supra* section III.A, pp. 2191–93.

<sup>53</sup> See sources cited *supra* note 2.

<sup>54</sup> See sources cited *supra* note 2.

argument does try to make a functional case for the classification-based approach, albeit an indirect one. Underlying IP rights, the argument goes, serve a notice function. They alert users to the fact that there may be conditions on their ability to use the products at issue. Section B argues that this justification is flawed for two reasons. First, the underlying IP right does not in fact generate effective notice of potential viral conditions; and second, a mere notice strategy is in any case insufficient to address the information cost concerns that arise in the viral context.

#### A. *The Formal Justification*

The formal justification for the classification-based approach was put most bluntly by Professor Eben Moglen: “[A copyright holder’s] right to exclude implies an equally large power to license . . . [T]he work’s user is obliged to remain within the bounds of the license not because she voluntarily promised, but because she doesn’t have any right to act at all except as the license permits.”<sup>55</sup> In other words, the greater power given by the underlying IP right to exclude from all uses implies a lesser power to exclude unless certain conditions are met. And because the power to exclude is enforceable against the world, so too are the conditions.

The problem with this justification is that it elevates “property” or “contract” form over economic substance. In fact, as will be shown, nothing about the existence of underlying IP rights magically raises the social value of enforcing attached viral terms. If anything, it cuts the other way. To begin with, an underlying IP right does not increase the social value of viral relationships or business models. Some business models (for instance, peer production of software) involve IP-protected material; others (for instance, peer review) do not. There is no reason to think that the former are systematically more socially valuable than the latter.

The real effect of accepting this justification, then, is to substantially increase the effective size of the IP monopoly. The “greater power” to exclude is only the power to exploit the value of the information good itself; the supposedly “lesser power” to exclude conditionally makes the good a platform for viral business methods, and thus allows the right holder to exploit existing *social networks*. Rights holders can capture some of the value of the information encoded in those networks and harness the creativity of the people they comprise.

So the real question is whether the very extension of the IP monopoly *itself* produces social value. This question turns on whether the scope of the monopoly is presently too strong or too weak for its pur-

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<sup>55</sup> Moglen, *supra* note 14.

pose. It turns out, this Note shows, that many kinds of IP monopolies are presently too strong. Strengthening them further would thus create negative social value. So, other things being equal, the presence of an underlying IP right should usually cut against enforcing viral terms.

Economically speaking, an IP monopoly is a delicate balancing act. Unlike real property, intellectual “property” is a nonrivalrous good: one person’s use of it does not reduce its value to others. Ideally, therefore, it should be sold at its marginal cost of production.<sup>56</sup> On the internet, copying an electronic work is essentially free, so the marginal cost of production is effectively zero. The IP monopoly, however, ensures that the good is not sold at its marginal cost, but at the much higher monopoly price instead, and thus produces hefty deadweight losses.<sup>57</sup> On the other hand, the prospect of monopoly rents often incentivizes authors and inventors to create intellectual works in the first place. The sweet spot, therefore — the optimal strength of the monopoly — is the point at which its marginal incentives for creation exactly balance its marginal deadweight losses.

It may be impossible to say precisely where this sweet spot lies, but there is a consensus among economists today that many IP monopolies have gone far beyond it and are already far too strong.<sup>58</sup> Making them even stronger produces more social cost than social benefit. Thus, the formal justification for the classification-based approach is perverse. Far from being a reason to enforce viral terms, an underlying IP right should actually be a strike against doing so.

### B. *The Functional Justification*

A second, more subtle justification for the classification-based approach does attempt to tackle the information cost externality problem. It has been advanced by a number of scholars,<sup>59</sup> most eloquently by Professor Molly Shaffer Van Houweling.<sup>60</sup> She argues (1) that people

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<sup>56</sup> See, e.g., BENKLER, *supra* note 5, at 36–37; see also Kenneth J. Arrow, *Economic Welfare and the Allocation of Resources for Invention*, in NAT’L BUREAU OF ECON. RESEARCH, THE RATE AND DIRECTION OF INVENTIVE ACTIVITY 609, 619–22 (1962).

<sup>57</sup> See BENKLER, *supra* note 5, at 36–38.

<sup>58</sup> For example, a group of economists, including five Nobel Prize winners, wrote an amicus brief in *Eldred v. Ashcroft*, 537 U.S. 186 (2003), that opposed the extension of the copyright term on the ground that the copyright monopoly was already too strong. See Brief of George A. Akerlof et al. as Amici Curiae in Support of Petitioners, *Eldred*, 537 U.S. 186 (No. 01-618) [hereinafter The Economists’ Brief]; see also *Eldred*, 537 U.S. at 254–57 (Breyer, J., dissenting) (discussing the economists’ brief and concluding that “the incentive-related numbers are far too small . . . [to] conclude] rationally . . . that the [copyright monopoly] extension’s economic-incentive effect could justify the [resulting] . . . harms”).

<sup>59</sup> See, e.g., Merges, *supra* note 12, at 120–21; Molly Shaffer Van Houweling, *The New Servitudes*, 96 GEO. L.J. 885 (2008); see also Merrill & Smith, *Optimal Standardization*, *supra* note 30, at 42.

<sup>60</sup> See Van Houweling, *supra* note 59, at 932–39.

already have an obligation to know IP law; (2) that therefore they know that they need permission to do things that would violate exclusive IP rights; (3) that they are thus on notice to investigate conditions attached to taking such actions; and (4) that therefore conditions on IP rights do not create significant extra information costs.<sup>61</sup>

This argument is superficially plausible but ultimately unconvincing. It has two different but related flaws. The first is that the underlying “property” right does not in fact generate effective notice of potential viral conditions. Customers do not know the law, and even if they did, they would not know to what objects the law applies.

With regard to knowing the law, it is probably true that most customers have a vague idea about intellectual property rights and know that certain egregious violations, such as widespread duplication and distribution, are forbidden.<sup>62</sup> The problem is that the argument does not confine itself to such “famous” IP rights, but applies to every obscure ramification of IP law. We need not look far to find an example of the absurdity of that claim. For example, the Copyright Act<sup>63</sup> gives an exhaustive list of its exclusive rights.<sup>64</sup> It gives rights to prevent the reproduction, distribution, performance (for music, plays, etc.), and display (for visual art) of copyrighted works, and the creation of derivative works.<sup>65</sup> There is no right to prevent “use” of the copyrighted work. Yet, in the computer context, some courts have effectively created such a right by holding that every time a work is loaded into memory — an essential element of any use on a computer — it is being copied in violation of the reproduction right.<sup>66</sup> Not only would the average layperson not know about this rule, but even a trained lawyer who had read the statute probably would not guess it. Yet almost every interaction on the internet implicates this exclusive right. Users usually do not even have notice that they have violated the right,<sup>67</sup> let alone notice of arcane viral terms that might attach to doing so.

Even if users were magically endowed with a perfect understanding of IP law, the existence of exclusive rights still would not effectively put them on notice to seek out viral terms. This is because, as is explained in Part V, there is no effective way to index intellectual in-

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<sup>61</sup> See *id.*

<sup>62</sup> See, e.g., Grant C. Yang, *Can-Spam: A First Step to No-Spam*, 4 CHI-KENT J. INTELL. PROP. 1, 21 (2004) (stating that lawsuits by the Recording Industry Association of America against online file sharers “created a lot of publicity”).

<sup>63</sup> 17 U.S.C. §§ 101–810 (2006).

<sup>64</sup> *Id.* § 106.

<sup>65</sup> *Id.*

<sup>66</sup> See, e.g., *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511, 518 (9th Cir. 1993).

<sup>67</sup> For instance, suppose a user gets an email that contains a copyrighted work. When she downloads her email, the work would be loaded into her computer’s memory. Thus, she would have infringed the reproduction right before she even knew that the object existed.

tangibles and any viral conditions that might attach to them. The example of the patent system is instructive. Great pains have been taken to let users know what ideas are subject to patent rights. Owners must register their ideas and describe them exactly, duplicate patents must not cover duplicate or similar ideas, and trained staff control access to patent protection.<sup>68</sup> What is more, most potential violators of patent rights are not lay consumers but sophisticated inventors and manufacturers. Despite all this, in many fields, the patent registry fails to provide effective notice of what is patented<sup>69</sup> and thereby fails to reduce information costs. If notice costs are high among sophisticated parties after all these precautions, they are probably even higher in the internet context among unsophisticated parties, without any precautions.

A second criticism of the Van Houweling approach is that even if through some miraculous dispensation IP rights were able to eliminate the information costs of learning that viral terms *exist*, they still would not eliminate the costs of understanding what the viral terms *are*.<sup>70</sup> Indeed, Van Houweling herself admits that “most people do not read license agreements . . . , and those that do read often do not make decisions based upon their content.”<sup>71</sup> But notice of the existence of terms is not sufficient by itself in the viral context. Upstream parties continue to externalize the information costs of understanding them, and so continue to have incentives to make them inefficiently complex. There would, for instance, be little downside for upstream parties in inserting large amounts of legalese into their terms.

These residual information costs are themselves a severe barrier to viral business methods. It is telling that even in the real property context — where efficient indexing is possible, registries are available, and transactions are already costly — third-party information cost externalities are still arguably so high that a *numerus clausus* principle<sup>72</sup> is needed.<sup>73</sup> This principle controls the costs of understanding property interests by restricting them to a few standard forms. The effects of these residual costs are orders of magnitude greater in the viral business context because, unlike real property transactions, viral business

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<sup>68</sup> See *infra* p. 2201.

<sup>69</sup> See JAMES BESSEN & MICHAEL J. MEURER, PATENT FAILURE: HOW JUDGES, BUREAUCRATS, AND LAWYERS PUT INNOVATORS AT RISK (2008).

<sup>70</sup> See, e.g., Merrill & Smith, *Optimal Standardization*, *supra* note 30, at 42 (drawing a distinction between making notice about burdens on information “easier to furnish” and making them “[easier] to process”).

<sup>71</sup> Van Houweling, *supra* note 59, at 934.

<sup>72</sup> “*Numerus clausus*” is the name given to “the principle that property rights must conform to certain standardized forms.” Merrill & Smith, *Optimal Standardization*, *supra* note 30, at 4.

<sup>73</sup> See generally *id.* (arguing that the *numerus clausus* principle is justified in the real property context despite the existence of efficient registries).



models rely on information's swift and essentially costless propagation through existing social networks.<sup>74</sup> Even a small increase in absolute information cost represents a very large increase in relative information cost and can significantly inhibit viral businesses.

The existence of an underlying property right, therefore, is very far from being an information cost panacea, and the classification-based approach is unjustified. An alternative rule is needed for enforcing viral terms — one that is situated at the property/contract interface and that tackles the information cost externality problem head on.

## V. REGISTRATION AND NOTICE

This Part evaluates two traditional mechanisms for tackling information cost problems directly: registration and notice. The registration approach would try to ameliorate the information cost problem by maintaining a central registry of viral terms, to which third parties could repair to discover their rights and obligations. The notice approach would attempt to accomplish the same result by forcing rights holders to affix notice of their viral terms to their digital products. Sections A and B argue that these approaches are both impractical and ineffective in the context of viral business methods.

### A. Registration

Registration is a common way to reduce third-party information costs. A central registry gives third parties a place to look for interests that affect them. Registration has been used in a number of areas in which private transactions have spillover effects on third parties, including real estate,<sup>75</sup> secured lending,<sup>76</sup> and patents.<sup>77</sup>

Registration of viral terms, however, would be both impracticable and ineffective. The impracticability arises because viral terms are essentially impossible to index. A registry needs to be able to identify the objects to which it applies — that is, to index them — so that users can quickly tell where burdens attach. Rights in land, for example, attach to parcels of land, which can be indexed by their positions on the surface of the Earth. But viral terms, if they attach to anything at

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<sup>74</sup> See *supra* Part II, pp. 2185–90.

<sup>75</sup> See John H. Scheid, *Down Labyrinthine Ways: A Recording Acts Guide for First Year Law Students*, 80 U. DET. MERCY L. REV. 91, 100–01 (2002).

<sup>76</sup> See Douglas G. Baird & Thomas H. Jackson, *Possession and Ownership: An Examination of the Scope of Article 9*, 35 STAN. L. REV. 175, 183 (1983) (“A secured creditor need not take possession of the collateral, but if he does not, he must make a public filing in a designated place before he can shift the risk of competing claims to other property claimants.”).

<sup>77</sup> The United States Patent and Trademark Office maintains a registry of all issued patents, each of which must “particularly point[] out and distinctly claim[] the subject matter [of] the . . . invention.” 35 U.S.C. § 112 (2006).

all,<sup>78</sup> attach to intangible pieces of information — for example, advertisements, software code, or documents. Unlike real property, these do not have unique physical attributes by which they can be identified. Worse, they can be replicated, modified, or combined with other pieces of information by downstream users. Indeed, many viral business methods — for example, peer production of software — require users to make such alterations, and need viral terms to run with the altered information.<sup>79</sup> Any registry of these ethereal and constantly-mutating elements would be imprecise, very hard to search, or both.

The U.S. Patent and Trademark Office's registry of granted patents is an object lesson in the difficulty of indexing intangibles. No effort has been spared to index patented inventions with precision: every patent is required to "particularly point[] out and distinctly claim[]" the metes and bounds of the idea it represents;<sup>80</sup> only ideas that are significantly different from existing ideas are eligible to be patented;<sup>81</sup> and every application is screened by trained examiners.<sup>82</sup> Despite all this, studies show that the registry remains so imprecise that, in many fields, it fails to provide effective notice of what is patented.<sup>83</sup>

Even if a registry for viral terms were feasible, it would not be enough. As described in Part IV, two kinds of information costs are in play, and even an efficient registry could reduce only one of them. Specifically, it could reduce the costs of learning that potential viral terms exist, but not those of understanding what the terms are.<sup>84</sup> Upstream parties continue to externalize the latter costs, and so continue to have incentives to make the terms inefficiently complex. There would, for instance, be little reason for them not to insert large amounts of legalese into their terms. At best, therefore, registration is a supplement to standardization of terms, not a substitute for it.<sup>85</sup>

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<sup>78</sup> Some viral business models might require terms to run with services — say, "membership" in a group — rather than attach to any underlying *res*. The author knows of none such in operation today, but they are conceivable. Any legal infrastructure that purports to effectuate viral business models should not dismiss out of hand the possibility of enforcing such viral terms.

<sup>79</sup> See *supra* Part II, pp. 2185–90.

<sup>80</sup> 35 U.S.C. § 112.

<sup>81</sup> See *id.* §§ 102–103 (requiring inventions to be both novel and nonobvious with respect to the state of the field, in order to be patentable and hence registrable).

<sup>82</sup> See generally U.S. PATENT & TRADEMARK OFFICE, U.S. DEP'T OF COMMERCE, MANUAL OF PATENT EXAMINING PROCEDURE (8th ed., rev. 7, 2008) (laying out very detailed examination rules that examiners must follow and that candidates must master before they can become examiners).

<sup>83</sup> See BESSEN & MEURER, *supra* note 69, at 54–62, 147–64 (explaining why, in many fields, patents on the registry have imprecise boundaries and so fail to provide adequate notice of the inventions patented).

<sup>84</sup> See Merrill & Smith, *Optimal Standardization*, *supra* note 30, at 42.

<sup>85</sup> See *id.* at 40–42.

As is further described in Part IV, even in the real property context, where efficient indexing is possible and transactions are already costly, registration has not eliminated the need for a *numerus clausus* principle to reduce the residual information costs of understanding the content of different property interests.<sup>86</sup> Because viral business models rely on transactions being almost costless, the need to reduce information costs is even greater in the viral context. A registration system for viral terms would therefore be a breeding ground for complex, hard-to-understand terms, in addition to being imprecise and hard to search. It cannot be an effective legal basis for viral business methods.

### B. Notice

A notice strategy would enforce viral terms only if they were affixed to the covered products. Notice strategies are both impractical and ineffective in the viral context. Regarding impracticability, although it might be feasible to attach notices to some digital products,<sup>87</sup> such notice is not feasible for the products involved in viral relationships. Most viral business methods expect downstream users to distribute digital products, and many also expect them to manipulate and modify them.<sup>88</sup> These intermediate users may strip out attached notices, either maliciously or accidentally, and as a result, notice may not propagate to downstream users. Nevertheless, these business models would be ineffectual if downstream users were not also bound by the viral terms. In addition, as with the registration strategy, a notice strategy would allow rights holders to externalize the information costs of understanding viral terms, and thus incentivize overcomplexity.

## VI. A NEW RULE FOR ENFORCING VIRAL TERMS

This Part proposes a new legal rule, conceptually situated in the gray area between property and contract, that would enable many viral business models while keeping information costs relatively low. The proposed rule can be seen as a bottom-up *numerus clausus* principle. Viral terms *earn* the right to be enforced by proving to be widely known and understood in the relevant market. This rule is flexible, imposing no a priori restrictions on the kinds of terms that can become virally enforceable. But it also has low information costs, because no viral term is enforceable until it is *already* well known to its audience.

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<sup>86</sup> See generally *id.*

<sup>87</sup> See Merges, *supra* note 12, at 122; Merrill & Smith, *Optimal Standardization*, *supra* note 30, at 42.

<sup>88</sup> See *supra* section II.A, pp. 2186–88 (discussing peer production of software).

### A. *The Basic Rule*

Borrowing from trademark dilution law, this Note proposes that a viral term should be enforceable when either (a) the burdened party actually knows about and fully understands it; or (b) the term is “famous” in the relevant marketplace, and so is the fact that it attaches to the product at issue. Whenever the first test is satisfied, information costs are obviously small. Naturally, actual knowledge and understanding are hard to prove, and so this prong probably would be infrequently used. It serves only to prevent parties from fraudulently evading responsibilities they have knowingly assumed.

The second test is the critical one. It allows enforcement based on constructive knowledge. It derives from the “famousness” requirement of trademark dilution law and should be similarly implemented. To succeed in a dilution action, a plaintiff must show that her mark is so strong as to be akin to a “‘household’ name[] such as ‘Dupont, Buick, or Kodak.’”<sup>89</sup> In applying this rule to viral terms, this Note refines it in two ways: first, fame is evaluated in the market for the relevant good, rather than in the population as a whole;<sup>90</sup> and second, it is not enough that the term itself be well known, but it must also be well known that it applies to the product at issue. For example, the viral marketing no-trademark-removal term would be enforceable only if the relevant market knew both that it was forbidden to remove trademarks from ads and that the content at issue was an ad.

### B. *Economic Analysis*

If a term is notorious among those who will be burdened by it, then the information cost effects of enforcing it will be small. In this case, most market players would have known what they were getting into before they were bound. Also, this rule forces rights holders to internalize users’ information costs, which gives them incentives to keep their viral terms simple and also to invest in publicizing them.

Finally, there is good reason to think that the proposed rule would be administrable, because the analogous requirement has proved so in

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<sup>89</sup> *A.B.C. Carpet Co. v. Naeini*, 2002 WL 100604, at \*5 (E.D.N.Y. Jan. 22, 2002) (quoting *TCPIP Holding Co. v. Haar Commc’ns, Inc.*, 244 F.3d 88, 99 (2d Cir. 2001)); see also Trademark Dilution Revision Act of 2006, 15 U.S.C. § 1125(c)(2)(A) (2006) (“[A] mark is famous if it is widely recognized by the general consuming public of the United States as a designation of source of the goods or services of the mark’s owner.”); ROGER E. SCHECHTER & JOHN R. THOMAS, *INTELLECTUAL PROPERTY* 697–710 (2003).

<sup>90</sup> The trademark analogue of this would be to allow famousness to apply to marks that have only “niche fame.” An example is “LEXIS,” which is well known to lawyers, but not to the population at large. “The emerging judicial consensus” is that niche fame is not sufficient in the trademark dilution context. SCHECHTER & THOMAS, *supra* note 89, at 705. The policy reason for that outcome, however, is specific to trademark dilution law. As explained in the text, in the viral context niche fame is the appropriate concept to use.

the trademark context. As standards go, famousness is exceptionally definite. Unlike other standards, it is not tied merely to vague and malleable “factors,” but takes account of objective survey evidence as well. Indeed, courts have developed rules about what sorts of surveys count to prove “famousness.”<sup>91</sup> Plaintiffs attempting to prove the famousness of their viral terms would similarly conduct methodologically rigorous consumer surveys to show that they are well known.

Most criticisms of the trademark “famousness” standard do not apply to the use proposed here. A common criticism is that local courts, bursting with local pride, are apt to find regional marks “famous,” even though they are not so nationwide.<sup>92</sup> There are three reasons why this concern does not apply. First, while it is true that some early dilution cases applied the standard too loosely,<sup>93</sup> recent legal developments — specifically, revised statutory criteria<sup>94</sup> and circuit court admonitions to interpret “famousness” strictly<sup>95</sup> — may have ameliorated the problem even in the trademark context.<sup>96</sup>

Second, even if the problem remains significant in trademark law, local favoritism is a negligible problem in the viral context. Viral terms, unlike local brands, rarely cluster in one locality; they are internet phenomena, with a global reach. Only very rarely will a term be directed to — and well known in — one geographical area alone. Moreover, if any terms *are* so targeted, then under the proposed rule they *should* be enforced in the local market. Unlike trademarks, viral terms need not be nationally famous to be enforceable.

Finally, to the extent that the trademark famousness requirement is subject to criticism for vagueness — though, as explained above, “famousness” is very definite as standards go — that criticism cannot ap-

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<sup>91</sup> See generally Robert H. Thornburg, *Trademark Survey Evidence: Review of Current Trends in the Ninth Circuit*, 21 SANTA CLARA COMPUTER & HIGH TECH. L.J. 715 (2005) (summarizing trademark survey techniques and rules in the Ninth Circuit).

<sup>92</sup> See 4 MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 24:104, at 24-297 (4th ed. 2009) (“Under the 1996 Federal Act, too many courts did not take the “fame” requirement seriously and elevated to the “famous” category marks that surely did not belong there.”); Mark A. Lemley, *The Modern Lanham Act and the Death of Common Sense*, 108 YALE L.J. 1687, 1698 (1999) (“[C]ourts applying [the famousness requirement] have been quite willing to conclude that a local favorite, or a rather obscure company, is ‘famous’ within the meaning of the Act.”).

<sup>93</sup> See Lemley, *supra* note 92, at 1698 (“[M]arks such as Intermatic, Gazette, Dennison, Nailtiques, TeleTech, Wedgewood (for new homes, not china), Papal Visit 1999, and Wawa have been declared famous.”).

<sup>94</sup> See Trademark Dilution Revision Act of 2006, 15 U.S.C. § 1125(c)(2)(A) (2006).

<sup>95</sup> See, e.g., *Everest Capital Ltd. v. Everest Funds Mgmt.*, 393 F.3d 755, 763 (8th Cir. 2005) (“The judicial consensus is that ‘famous’ is a rigorous standard.”); *Thane Int’l, Inc. v. Trek Bicycle Corp.*, 305 F.3d 894, 912 n.14 (9th Cir. 2002) (“[F]amousness is . . . a hard standard . . .”).

<sup>96</sup> See MCCARTHY, *supra* note 92, § 24:104, at 24-289 to -297 (acknowledging that many courts interpreted “famousness” too generously under the old Dilution Act, but suggesting that the new Act and recent judicial pronouncements could be taken to mean that it would be interpreted more carefully in the future).

ply to viral law. New rules that have wide scope and many unforeseen effects — for example, new interpretations of constitutional rights<sup>97</sup> — are commonly not formulated as bright-line rules, but as standards.<sup>98</sup> This is because it is very hard to formulate *ex ante* a bright-line rule that will remain useful as circumstances change in unforeseen ways. Instead, standards are laid out and gradually concretized over time, as courts adapt them to evolving circumstances through a process of common law rulemaking. The enforcement of viral terms presents a similar case. Viral business models are in their infancy and a bright-line rule would be too rigid to meet the demands they will make as they grow. The objectively grounded “famousness” standard proposed here provides a better mix of predictability and flexibility.

## VII. CONCLUSION

The internet has the potential to further change the business landscape, but it cannot do so without a corresponding change in the legal landscape. Viral business methods can develop fully only if some viral terms are enforceable. This Note argues that the most common current approach to enforcing viral terms — in which enforceability turns on whether the terms are classified as contractual provisions or as valid conditions on some underlying property right — is an inappropriate attempt to fit the problem into the property/contract dichotomy, and has perverse economic effects. Other traditional approaches — registration and notice — have also proven ineffective.

Therefore, this Note proposes a new rule at the property/contract interface for enforcing viral terms. It proposes that a bottom-up *numerus clausus* rule should be applied, in which viral terms earn the right to be enforced by making themselves well known in the marketplace beforehand. This rule imposes no a priori restrictions on the kinds of terms that can become virally enforceable, and also keeps information costs low by not enforcing viral terms except on proof that they are actually known to their audience. Finally, this rule is likely administrable because a similar rule exists in trademark law and has proved administrable there.

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<sup>97</sup> See, e.g., *District of Columbia v. Heller*, 128 S. Ct. 2783 (2008) (interpreting the Second Amendment for the first time as guaranteeing an individual right to bear arms).

<sup>98</sup> See *id.* at 2821 (“Justice Breyer chides us for leaving so many applications of the right to keep and bear arms in doubt . . . . *But since this case represents this Court’s first in-depth examination of the Second Amendment, one should not expect it to clarify the entire field. . . .* And there will be time enough to expound upon . . . justifications for . . . [exceptions] if and when those exceptions come before us.” (emphasis added) (citations omitted)).