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Towards a system of estates in virtual property

Juliet M. Moringiello

Widener University School of Law, USA
E-mail: jmmoringiello@widener.edu

Abstract: Virtual worlds such as Second Life have received a lot of press in the USA recently. As individuals and businesses participate in these virtual worlds, questions arise regarding the application of existing laws to their virtual world transactions. Many questions have arisen regarding the property rights of participants in virtual worlds, and a Second Life member recently sued Linden Research, the company that developed Second Life, alleging that Second Life converted his virtual property. The questions regarding the legal nature of virtual world assets tend to mirror the questions regarding intangible rights generally, as courts have tended to struggle over whether these rights are property rights or contract rights. In this paper, I propose that the principle of *numerus clausus* be applied to virtual property, so that courts faced with disputes over such assets will have mandatory property forms to which to resort. Such an approach would limit the ability of vendors of such rights to customise them through their contracts, which are commonly embodied in electronically presented standard forms.

Keywords: virtual property; *numerus clausus* principle; second life; intangible property; contract.

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Biographical notes: Juliet Moringiello is a Professor of Law at Widener University School of Law in Harrisburg, Pennsylvania, USA. She earned her Bachelor of Science in Foreign Service from Georgetown University, her JD from Fordham University, and an LLM in Legal Education from Temple University. At Widener, she teaches in the areas of commercial law, bankruptcy, electronic commerce and property. Professor Moringiello is an elected member of the American Law Institute, an active member of the Cyberspace Law Committee of the American Bar Association Business Law Section and the Editor of the 'Annual Survey of Cyberspace Law', published in *The Business Lawyer*.

1 Introduction

Virtual worlds have received a lot of attention in the American press recently. The *New York Times* mentioned Second Life in more than 20 articles between 1 June and 15 October 2007. Even popular television shows such as *Law and Order* have set episodes in Second Life. As people conduct their business and personal transactions in these virtual worlds, legal institutions are called upon to resolve disputes involving their rights in these worlds.

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This past year, Linden Research, the developer of the virtual world Second Life, was sued by one of its members, Marc Bragg. One of Bragg's allegations was that Linden, by terminating his Second Life account, wrongfully deprived him of his virtual property and is thus liable for conversion. Linden Research, on the other hand, contends that Bragg's use of any virtual world property is governed by the Second Life Terms of Service, which appears to grant users a license to use Linden's property during the time that they are members of Second Life.

The case of *Bragg v. Linden Research*[1] highlights many of the issues that will arise when courts are forced to determine rights in intangible assets. The proliferation of virtual world activity makes virtual property a good vehicle for discussing the problem that courts have in determining the rights of persons in intangible assets.

In this paper, I suggest that rights in intangible assets be viewed in the context of the *numerus clausus* principle. The *numerus clausus* mandates that there be only a fixed number of ways of holding property. The principle is universally recognised as applicable to real property, and as a result of its application persons purchasing or financing real property know that they need only be concerned about a limited number of estates in that land.[2] The *numerus clausus* is not applied as strictly to intangible rights.[3] There may be several reasons for this. One is that lawmaking institutions tend to have difficulty separating intangible assets from the contracts that created those assets. Another is that virtual property is unfamiliar to us. Often, when we think of intangible property, we think of two distinct types of assets – payment rights, such as accounts receivable, deposit accounts, and negotiable instruments, and intellectual property, such as patents, trademarks and copyrights.

Intangible property rights beg for standardisation. Using virtual world property as an example, I will illustrate some of the problems that intangible assets raise for the law. I will then discuss the *numerus clausus* principle, drawing heavily from the work of Thomas Merrill and Henry Smith. I will then explain why the *numerus clausus* principle would help to explain rights in virtual property and suggest some approaches to fashioning estates in virtual world assets.

2 An introduction to virtual worlds

A virtual world can be defined as an online environment that is both persistent and dynamic.[4] It is persistent because it does not cease to exist when the participant turns her computer off; it is dynamic because it is continuously changing. There are two broad categories of virtual worlds. The first category consists of scripted games such as World of Warcraft and the second consists of non-scripted worlds such as Second Life.

A participant in a scripted game world acquires property by playing the game. A player advances by acquiring game objects. These game objects grant powers to the player, and the player uses these powers to achieve higher status in the game.[5] The terms of use for games such as World of Warcraft forbid real-world trades of these assets.[6] Notwithstanding this prohibition, property won in World of Warcraft is routinely traded on other websites. There is also an emerging economy of 'gold farmers' who employ individuals to play these games for hours on end in order to achieve and sell desirable status.

Operators of scripted games tend to eschew commodification of their games. One reason for their position is that the game designers have a great interest in the progression of the game. The gamers themselves have certain expectations as well; if a participant spends hundreds of hours achieving a top player level, that participant does not want someone who bought his status to achieve a higher level than him. William Bartle, a noted game designer, compared the commodification of online games to the ability of any individual to purchase the world high-jump record and be recognised as the best high jumper in the world. According to Bartle and other game designers, game operators should have the ability to terminate traded characters because traded characters interfere with the game's ability to function as a game.[7]

In non-scripted worlds, the content and progression of the world are provided by the participants. A person who joins Second Life can acquire assets in several ways. One way that a participant can acquire assets is by buying them. Linden conducts land auctions in Second Life, and a participant who wants to build a building can do so on 'his' land.[8] A participant can also build assets using the software provided by Linden. Building is a complicated process, as Linden provides only the basic building units and textures.[9] To build a house takes both time and skill. As persons with these skills proliferate in Second Life, they establish retail outlets for their creations. Therefore, a person in Second Life without much time or skill can purchase the items she needs for her Second Life existence from these in-world retailers. The participant makes her purchases with Lindens, the Second Life currency that, at the time of this writing, trades at 265 Lindens to the US dollar. On the Linden Dollar Exchange, or Lindex, participants are invited to buy Lindens using US dollars. Linden Labs does not agree to repurchase this currency when a participant wishes to leave Second Life; rather, the participant must find a buyer for her virtual currency.[8]

2.1 The second life terms of service: do members receive any property rights?

Linden sends its users mixed messages regarding their rights in the Second Life assets that they either acquire by purchase or develop using their skill and time. In many of Linden's messages to the public, it represents that members of Second Life have property rights in these assets. For instance, the Second Life website, on its 'Land: How To' page, appears to grant members full property rights in their virtual land. The page informs members that '[o]wning land allows you to control land'. The page goes on to inform members that they have rights normally considered to be components of the 'bundle of rights' that constitute property: the right to exclude ('you can prevent others from visiting or building') and the right to alienate ('sell it').[10]

The Second Life Terms of Service send a very different message regarding ownership rights in both virtual currency and virtual land. Contradicting the website's invitation to buy Lindens, the Terms of Service inform readers that Lindens are an 'in-world fictional currency' and that by 'purchasing' Lindens, the buyers are obtaining a license to use a feature of the Second Life product. In the Terms of Service, Linden reserves the right to manage, regulate or eliminate the currency for any reason in its sole discretion.

Linden's representations in the Terms of Service regarding virtual land and other assets are even more confusing. The Terms of Service grant members a license to use the Linden 'service'. The very next paragraph, however, grants members 'copyright and other intellectual property rights' with respect to anything they create in Second Life.

One paragraph later, Linden appears to take back what it has just given, as that paragraph states that while a creator of content has intellectual property rights in that content, that person has no rights in any data stored on the Linden servers.[8]

2.2 A second life member sues: Bragg v. Linden Research

Marc Bragg was a member of Second Life. He found an 'exploit', or a method of avoiding the Second Life land auction process. This exploit enabled him to acquire land cheaply. When Linden discovered this behaviour, it terminated Bragg's Second Life account, depriving him of his Lindens and his land. Linden found its right to terminate the account and confiscate Bragg's assets in the Second Life Terms of Service. Bragg sued Linden for, among other things, conversion. Conversion is defined in the Restatement (Second) of Torts as "an intentional exercise of dominion or control over a chattel which so seriously interferes with the right of another to control it that the actor may justly be required to pay the other the full value of the chattel". In order for Linden to be liable for conversion, Bragg must establish that he had property rights in the virtual land and the Lindens.

In October 2007, the parties in *Bragg v. Linden Research* settled their dispute. In any event, *Bragg* might not have been the best case to establish the property rights of virtual world participants because Marc Bragg created nothing. He did, however, buy both Lindens and land. The one published decision in the case, however, illustrates why mandatory property rules might be necessary to protect the rights of those who spend a lot of time and money creating their virtual world experience. In May 2007, the United States District Court for the Eastern District of Pennsylvania held that one provision in the Terms of Service, the arbitration clause, was unconscionable.[11]

The May 2007 decision gives one justification for a system of mandatory property rules for virtual property. Although the court held that only one provision of the Terms of Service, the arbitration provision, was unconscionable, it is not a large jump to imagine the court holding the entire agreement to be unconscionable and thus unenforceable. The Restatement (Second) of Contracts provides that if a contract or term is found to be unconscionable at the time that the contract is made, the court can refuse to enforce the contract, or can enforce the contract without the unconscionable term. The Uniform Commercial Code has a similar provision applicable when the transaction is for the sale of goods. In determining whether a contract or term is unconscionable, courts look for evidence of oppression and unfair surprise. If a court refuses to enforce the Second Life Terms of Service, it seems that the Second Life member would be left with very little. As a remedy, a court might order Second Life to return the member's money, but it is not likely that the court would order restoration of the land or other assets. The reason that this is not likely is that today, the extent of the members' rights in those assets is not clear. Without a clear method of determining the property rights of virtual world participants, it is possible that courts will fail to separate the property rights created or transferred by the Terms of Service from the contract created by the Terms of Service. This failure to adequately separate the property rights transferred by a contract from the contract itself is a fairly common problem in American law when the property rights transferred are intangible.

3 An argument for applying the *numerus clausus* to virtual property

In several other articles, I have noted that American courts have difficulty protecting intangible rights by property rules.[12] As noted above, one problem that courts have is separating the contract creating or transferring the right from the right transferred. Several cases involving internet domain names illustrate this difficulty. Probably the best-known of these cases is the decision of the Virginia Supreme Court in *Network Solutions v. Umbro International, Inc.*, a case in which a judgement creditor attempted to seize a number of generic domain names registered to the defendant cybersquatter. In denying the creditor's request to seize the domain names, the court noted that a domain name is 'a product of a contract for services' and thus not property that could be reached by the creditor using the applicable Virginia statute.[13] This holding was curious for many reasons, not the least of which was the fact that generic domain names such as the pornographic ones at issue in *Umbro* are freely transferable and routinely sold for hundreds of thousands of dollars. The problem separating an asset from the contract transferring the asset is unique to controversies involving intangible assets; it is unlikely that anyone would classify a house as a 'product of a contract'.

Another problem that American courts have in dealing with intangible rights is that they tend to classify all non-payment intangibles as 'intellectual property'. Another case involving domain names, *Dorer v. Arel*, illustrates both this tendency and the harm caused by this misclassification. *Dorer*, like *Umbro*, involved a dispute over a creditor's rights in a domain name. To find the correct property category in which to place the domain name, the court turned to intellectual property law, reaching a strange result. Applying trademark law, the court found that a domain name that was entitled to trademark protection could be considered property of the domain name registrant, but a domain name that was generic, or not entitled to trademark protection, could only be considered a contract right.[14] The strange aspect of this decision is that a domain name entitled to trademark protection is not easily transferable, as a trademark cannot be transferred without the attached goodwill. A generic domain name, on the other hand, is potentially worth thousands, if not hundreds of thousands of dollars.

These cases involving domain names illustrate the need for clear property categories for intangible rights. The law already recognises payment rights such as accounts receivable and negotiable instruments, and contains clear rules for the creation and transfer of such rights. The law likewise recognises limited forms of intellectual property rights, and contains rules for the creation and transfer of such rights. Other intangible assets, however, currently escape easy classification, causing courts to treat each new intangible asset as though it presents a case of first impression.

The Terms of Service that create and transfer virtual world property are evidence of some of this classification confusion. In the world of intellectual property rights, it is common for the creator of the intellectual property to convey some of her rights by license. There are many reasons to convey by license, and one effect of a license is that it avoids the 'first sale' doctrine whereby the purchaser of the physical manifestation of the intellectual property takes it free from further transfer restrictions. On the other hand, it is not common to transfer a car or a piece of real estate by license.[15] Linden represents on the website for Second Life that its members own their in-world creations, but the Terms of Service for Second Life grant rights in the creations by license, characterising the rights granted as 'intellectual property' rights.

3.1 'Virtual property' as an asset class

Professor Fairfield has taken an important first step in classifying intangible assets that are neither payment rights nor traditional intellectual property rights. Fairfield labels these assets 'virtual property'. According to Fairfield, virtual property is distinguished by three qualities: it is rivalrous, persistent, and interconnected. Virtual property's rivalrousness distinguishes it from intellectual property rights.[16] Intellectual property itself is a loosely defined category in that it is really an umbrella term used to describe several ways in which the law protects ideas. Intellectual property is distinguished by its non-rivalrousness, that is, many persons can enjoy intellectual property rights at the same time without diminishing the quality or usefulness of the rights.

The internet can be said to blur the line between Fairfield's 'virtual property' and what we commonly think of as intellectual property. For instance, when we think of intellectual property on the internet, we commonly think of computer code, whether that intellectual property be software or a song. Intellectual property law protects ideas, but a pure idea is not entitled to protection as intellectual property. For instance, for an idea to be protected by copyright in the USA, the idea must be fixed in a tangible medium. Computer code qualifies as such a tangible medium, although few people ordinarily think of computer code as tangible. The code itself is not the intellectual property, the idea embodied in the code is.

Virtual property (or, as I have named such property in an earlier article, 'electronic assets') is also made up of computer code. This code, however, acts like tangible personal property, in that it is rivlarous, meaning that it can be possessed or controlled by only one person at a time. Because it is code, however, the natural impulse of persons dealing with it is to place it in the intellectual property category.

I suggest, as does Professor Farifield, that computer code that acts like tangible property be viewed by legal institutions as the equivalent of other rivalrous property, such as tangible personal property and real property.[17] Persons involved in lawmaking must segregate the pure idea from the vessel containing the idea. If I purchase a stained glass window from an art gallery and install it in my house, few people would argue that I do not own the stained glass window. Certainly, I cannot copy and sell the design, but I can sell the window. Likewise, if the artist who made the window used patented materials to make the window, she cannot claim intellectual property rights in those materials, but she does have intellectual and other property rights in the finished product. This concept is recognised in copyright law; the ownership interests in the copyright and the associated tangible copy are completely independent.[18] Fairfield's virtual property should be viewed in the same way as this tangible property – whether it be the component materials or the finished product. But viewing virtual property as tangible property is only one step in determining the rights that are transferred, and this is why the *numerus clausus* is relevant.

3.2 Why the numerus clausus makes sense for virtual property

The term *numerus clausus* refers to the principle that the permissible forms of property interests are limited, or 'the number is closed'. The *numerus clausus* distinguishes property rights from contract rights; contracts, which bind only the parties thereto, can be customised with few limits, but property rights, which bind the entire world, can be customised in a limited number of ways. The *numerus clausus* exists in US law in the

US system of estates in land, and the principle prevents courts from recognising property interests that fall outside of the closed set. As a result, when parties attempt to customise property interests in a way that does not conform to a fixed form (a common example is the landlord who conveys a tenancy 'for the duration of the war'), a court faced with this novel interest will determine which of the recognised property forms best fits the interest that the parties created.[19]

In their article, *Optimal Standardisation in the Law of Property: The Numerus Clausus Principle*, Thomas Merrill and Henry Smith offer several defenses of the principle. The defense that resounds most strongly in the virtual property area is the argument that the *numerus clausus* minimises the external costs of measurement. The principle protects all market participants. For instance, the buyer of a house knows, because of the operation of *numerus clausus*, that title to the house can be held in only a limited number of ways. This person need not research infinite ways of holding title to property; title to the house can be conveyed in fee simple, as a life estate, or in a defeasible fee. If title is held by two people, they can hold the house as tenants in common, joint tenants, or tenants by the entirety. The concept of title is invisible to the buyer of a home in ways that other aspects of the home, such as the number of bedrooms or the condition of the kitchen, are not.[20]

It is for these invisible aspects of property, like title, that the *numerus clausus* principle exists. As Merrill and Smith point out, one way to control external measurement costs is by the standardisation of property rights. The *numerus clausus* principle applies most strongly to the aspects of property that are the "least visible and hence the most difficult for the ordinary observer to measure."[21] Although Merrill and Smith concede that notice of interests in property can help solve the problem of external measuring costs, they make a distinction between *notice* of rights and the ability of persons to process that notice.[22]

Merrill and Smith's measuring cost justification for the *numerus clausus* is particularly relevant as new forms of intangible property emerge. Notice of rights in intangible assets is notoriously difficult to process. These rights are often granted in electronically-presented standard-form contracts. Although American courts tend to enforce such contracts so long as the offeree is given sufficient notice of the terms,[23] many of these contracts are lengthy and difficult to understand. As noted above, the Second Life Terms of Service appear to both grant and deny property rights to members of Second Life. Without a standard framework for estates in virtual property and other electronic assets, the participants in the markets for such assets will be forced to spend a great deal of time inquiring about the possible extent of their rights in such assets.

This measuring cost problem is obvious in the domain name market. There are numerous domain name registrars, all of which transfer domain names pursuant to electronically-presented standard-form contracts. To the casual observer, all domain names might appear to be part of a standard category of property. Certainly they differ in name, and they will also differ according to their top-level domains, such as .com and .net. The contracts offered by the registrars create different property rights, however. For example, both Network Solutions and Register.com sell names in the .com domain. Both registrars provide that their domain names can be voluntarily transferred by the registrant-owner. The Network Solutions contract, however, provides that the name cannot be involuntarily transferred (to creditors, for instance), while the Register.com agreement allows both voluntary and involuntary transfers. As alienability is a key

component of property rights, these two nearly identical contracts, conveying nearly identical assets, in fact transfer somewhat different estates in those assets. This pattern surely repeats itself with all types of virtual property, including virtual world assets, which are conveyed by contracts that are not only unique to the operator of the virtual worlds, but which are also subject to change, resulting in property rights that may differ based on the date that the participant joined the virtual world.

4 Working towards a system of estates in virtual property

A strict system of estates appears at first to be limited to real property. While it might be desirable to import portions of the real property system of estates to virtual worlds, it is also possible to apply some similar concepts from the law of personal property. Moreover, if a *numerus clausus* principle is to apply to intangible assets generally, it is important to keep in mind that some of these assets will not resemble real property in the way that virtual world assets might.

A sale of tangible personal property transfers the equivalent of a fee simple, or full ownership, in that asset. A sale is not the only method by which personal property can be conveyed, however. As explained earlier in this paper, rights in intellectual property are often licensed. In addition, persons often enter into lease transactions for tangible personal property. In American law, parties entering into lease and license transactions are not able to customise their conveyances in limitless ways. In that sense, the *numerus clausus* principle is alive for personal property conveyances. Both leases and licenses can be recharacterised as sales if the relevant transaction possesses too many characteristics of a sale.[24] The rule that both licenses and leases can be recharacterised as sales is a product of the common law, and the lease rule has been codified in the Uniform Commercial Code. Applying such a rule to the Second Life Terms of Service, a court might possibly rule that, regardless of the language of the contract, the contract conveys ownership rights, not license rights.

Full, or fee simple, ownership, might not be the most desirable form of ownership for virtual world property. As noted above, some virtual world operators, the game operators, have a great interest in the progression of the game. For them, perhaps the most desirable property regime is the license regime, as a license grants permission to use something.[25] Because game operators have such a great interest in the design of the game, it would not be unreasonable for them to retain ownership rights in the virtual assets while granting permission to the players to use those assets.

Other virtual world operators have less interest in the progression of the world, but nevertheless have an interest in their members co-existing in a peaceful fashion. In worlds such as Second Life, members 'own' assets that look like both personal and real property. For instance, a Second Life member might buy 'land' from which she can exclude others, she might hire someone to build her a house on that land, and then she might make or purchase furniture for that house. A question might arise as to whether all of this property should be treated the same for the purpose of a system of estates, because after all, it is all just computer code.

Operators of virtual worlds might want to provide that members forfeit their virtual property if they behave in a certain manner. In that case, they could clearly provide that the property interest transferred in a fee simple determinable, thus causing the

member to forfeit his property on the occurrence of a stated event.[26] The law could provide a standard template for conveying such an interest, indeed, the law does already for interests in real property.

Alternatively, virtual world operators can adopt a fairly new form of ownership, the condominium form. It is not hard to imagine a virtual world as a giant common interest community, along the lines of a condominium or a homeowners' association. Property in condominiums and homeowners' associations is commonly transferred by deeds that contain numerous covenants with which the property owners must comply. Failure to comply with such covenants results not in forfeiture, but in fines.[27] Property law generally disfavours forfeiture and the amount of time and money that many virtual world participants spend developing their virtual assets would support the argument that forfeiture would be unfair to the members.

5 Mandatory rules versus private ordering

Subjecting intangible rights to application of the *numerus clausus* principle naturally creates tensions with the idea of freedom of contract. Applying the *numerus clausus*, however, does not forbid all customisation of intangible assets. First, the *numerus clausus* is not absolutely closed; it has opened to admit new forms of property rights such as the condominium and the right of publicity.[28]

The most valuable function of a property rights, or *in rem*, approach to intangible assets such as virtual property would be its channelling function. As noted above, American courts presently view such assets either as new intellectual property rights or as pure contract rights. A property rights approach incorporating the *numerus clausus* would channel courts away from viewing these rights as pure contract and channel them towards treating them as valuable assets that can be traded and financed. Merrill and Smith explain this function in *The Property/Contract Interface*. According to Merrill and Smith, the *in rem* strategy takes a two-step approach to use rights. First, such a strategy identifies particular assets and determines the person who is the owner of that asset. Second, the owner determines who can use the assets and the ways in which those persons can use it.[29] It is this first step, the identification of the asset, which would most help to clarify the law of intangible assets. Today, we too quickly classify virtual property as intellectual property that can and should be licensed. A *numerus clausus* approach might force us to think about the asset created or acquired by the virtual world member as something distinct from the code used to create the asset.

6 Conclusion

It is not the purpose of this article to develop a comprehensive scheme of estates in intangible property generally or virtual world property in particular. Virtual worlds, however, provide an interesting factual scenario for analysing rights in intangible assets generally. Courts in the USA have had a notoriously difficult time appreciating the property aspects of intangible rights transferred by contract, and as the economies of virtual worlds grow, it is likely that the future will bring more virtual world property

disputes to the courts. Applying the *numerus clausus* principle to virtual world assets will help courts resolve these property disputes, lending increased certainty to virtual world transactions.

Notes

1 Bragg v. Linden Research, 487 F. Supp. 2d 593 (E.D. Pa. 2007).

2 Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle,* 110 YALE L.J. 1, 10–13 (2000).

3 *Id* at 17.

4 F. Gregory Lastowka & Dan Hunter, *Virtual Worlds: A Primer, in* THE STATE OF PLAY, LAW, GAMES, AND VIRTUAL WORLDS 13, 15 (Jack M. Balkin & Beth Simone Noveck ed., New York University Press 2006).

5 Cory Ondrejka, *Escaping the Gilded Cage: User Created Content and Building the Metaverse,* 49 N.Y.L. SCH. L. REV. 81, 89 (2004).

6 World of Warcraft Terms of Use Agreement, http://www.worldofwarcraft.com/legal/termsofuse.html (last visited 1 November 2007).

7 Richard A. Bartle, *Virtual Worldliness, in* The State of Play, Law, Games and Virtual Worlds 31, 35-37 (Jack M. Balkin & Beth Simone Noveck ed., New York University Press 2006).

8 Second Life Terms of Service, http://secondlife.com/corporate/tos.php (last visited 23 October 2007).

9 Ondrejka, *supra* note 5, at 92.

10 http://secondlife.com/community/land-howto.php (last visited 12 February 2008).

11 Bragg v. Linden Research, 487 F. Supp. 2d 593, 611 (E.D. Pa. 2007).

12 *See generally* Juliet M. Moringiello, *Seizing Domain Names to Enforce Judgments: Looking Back to Look to the Future,* 72 U. CIN. L. REV. 95 (2003).; Juliet M. Moringiello, *False Categories in Commercial Law: The (Ir)Relevance of (In)Tangibility,* 35 FLA ST. U. L. REV. 119 (2007).

13 Network Solutions, Inc. v. Umbro Int'l, Inc., 529 S.E. 2d 80, 86 (Va. 2000).

14 Dorer v. Arel, 60 F. Supp 2d 558, 560-561 (E.D. Va. 1999).

15 See Jean Braucher, *Contracting Out of Article 2 Using a "License" Label: A Strategy That Should Not Work For Software Products,* 40 LOY. L.A. L. REV. 261, 264-265 (2006).

16 Joshua A.T. Fairfield, *Virtual Property,* 85 B.U. L. REV. 1047, 1053-1054 (2005); Lastowka & Hunter, *supra* note 4, at 15.

17 *See generally* Joshua A.T. Fairfield, *Virtual Property,* 85 B.U. L. REV. 1047.

18 John A. Rothchild, *The Incredible Shrinking First-Sale Rule: Are Software Resale Limits Lawful?,* 57 RUTGERS L. REV. 1, 5 (2004).

19 Merrill & Smith, *supra* note 2, at 11.

20 *Id.* at 34.

21 *Id.*

22 *Id.*at 37.

23 *See generally* Juliet M. Moringiello & William L. Reynolds, *Survey of the Law of Cyberspace: Electronic Contracting Cases 2005-2006,* 62 BUS. LAW. 195 (2006).

24 Elizabeth I. Winston, *Why Sell What You Can License? Contracting Around Statutory Protection of Intellectual Property,* 14 GEO. MASON L. REV. 93, 123 (2006).

25 Raymond T. Nimmer, The Law of Computer Technology : Rights, Licenses, Liabilities §7.4 (3d ed. West 2006).

26 Richard Powell, Powell on Property §2.05 (Michael Allen Wolf ed., Matthew Bender 2006).

27 William B. Stoebuck 6 Dale A. Whitman, The Law of Property § 8.21(3d ed. West 2000).

28 Merrill & Smith, *supra* note 2, at 55.

29 Thomas W. Merrill & Henry E. Smith, *The Property/Contract Interface*, 101 COLUM. L. REV. 773, 790 (2001).