location.location.location: a Snapshot of Internet Addresses as Evolving Property

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Abstract

I describe recent developments in the rules governing registration and ownership of Internet and World Wide Web addresses or “domain names.” I propose that elements of domain names are more similar to real estate than to trademarks and, therefore, it would be economically efficient to grant domain name owners stronger rights than those of mere trademark holders.

“The life of the law has not been knowledge: it has been experience. The felt necessities of the time, ... avowed or unconscious, even the prejudices which judges share with their fellow men, have had a good deal more to do than the syllogism in determining the rules by which men [are] governed.” *Oliver Wendell Holmes. The Common Law.*

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1. Introduction

How did it come about that so much of common law is economically efficient? Professors Paul Rubin (1977) and George Priest (1977) suggested an evolutionary mechanism whereby precedents evolve by trial and error (pun *intended*). First, they observed that economically inefficient rules tend to be challenged and litigated more often than efficient ones. Second, they point out that even if guided by nothing more than random trial and error, as judges are forced to repeatedly review an oft-challenged rule they inevitably will hit on efficiency-improving (and accordingly less-challenged) adjustments. Thus, the efficient rules will tend to live on unaltered whereas the inefficient ones will tend to continue changing. Eventually this process of natural selection culls away most unfit rules and arrives at a system of mostly economically efficient precedents that are less challenged and, hence, seldom revised.

In this note, I argue that the present rules and laws governing the ownership of electronic addresses or “domain names” on the Internet, which includes the World Wide Web, are
economically suboptimal. My thesis is that while domain names are at present protected mainly under trademark law, domain names are economically similar to real estate or business locations, and for this reason the efficient protection for them is somewhere closer to real property law than traditional trademark law. Following the evolutionary mechanism of Rubin and Priest, I anticipate that the laws governing domain name ownership will evolve to ultimately look more like real property law. Only time will tell whether this means trademark law will disengage from or evolve along with rules governing domain names.

2. Domain Names and The Competition Over Them

Because of the total decentralisation of the Internet, the number of Internet users is a matter of controversy. Recent estimates range from a high of 24 million Internet users, including 18 million World Wide Web users, in the U.S. and Canada to a low of 16 million Internet users and 11.5 million Web users in the U.S. The higher estimate was based on a Summer, 1995 random telephone survey of 4200 adults by Dun and Bradstreet Corp.'s Nielsen Media Research Unit, whereas the lower estimate was put forth by academic critics of the Nielsen study at Vanderbilt University (Hoffman D et al, 1996) Nielsen has since revised its own estimate to 19 million Internet users. Of these users, 16% are “hard core” (used Internet within 24 hours of survey), 21% “regular” (used within one week of survey), 37% “occasional” (used within one month of survey), and 24% “infrequent” (has used before, but almost never use) (Hoffman et al, 1996)

Adding to the uncertainty is the Internet’s exponential growth. Even Nielsen's conservative Vanderbilt critics agree that the number of Internet users appears to be doubling annually, and that the Web in particular is exploding. One of the Internet's most optimistic visionaries is Nicholas Negroponte, director of M.I.T.’s Media Lab. Negroponte predicts one billion Internet users by the year 2000, an estimate he calls conservative (Hill G.C and Baker M, 1996). He believes that the growing ability to access the Internet by telephone and other unforeseen means will cause a boon exceeding what analysts presently extrapolate.

A “domain name” is an Internet address. It identifies a computer site on the Internet much like how a telephone number identifies a phone line in the global phone system. A domain name looks like

“YYY.ZZZ”.
Suffix ZZZ is the “top level” or “root” of the domain name; YYY is the “second level” or “trunk” of the name. Analogous to a tree, trunks may have optional higher level extensions, “branches.” Branches, which can also be thought of as being like telephone number extensions, are prefaced to and separated from YYY by periods. For instance, the “www-leland” branch of “stanford.edu” is “www-leland.stanford.edu.”

There are two kinds of root level names: geographic and nongeographic. Geographic roots indicate the country of registration. For example, “.us,” “.de,” “.ca,” and “.cn” are respectively American, German, Canadian, and mainland Chinese domain names administered by registration authorities within these respective countries. The Internet Assigned Numbers Authority (IANA) located in the Information Sciences Institute of the University of Southern California is charged with registering “.us” for the United States.

The nongeographic or “universal” roots are administered by the Internet Network Information Center (Internic), a private organisation in Virginia charged with registering domain names in the United States by the National Science Foundation. Universal roots are an American creation. While there are over 160 countries registering geographic roots, there are at present only five nongeographic roots, all registered by Internic. They are: “.edu” (short for education), “.gov” (government), “.net” (Internet networking facilitator), “.com” (commercial), or “.org” (organization—for instance, nonprofits—which do not fit under the other categories).

Because of their nonethnic global character, the nongeographic roots are greatly preferred by commercial and other entities over the geographic ones. It is easier to advertise a single universal name than to try and popularise 160 or more geographical names. Also, it is simpler to register and legally maintain a single name with Internic than to register over 160 names in as many countries each with their own registration authorities and legal systems. As a result, essentially all the hoopla and litigation has focused on the universal roots. Therefore, the remainder of this note will focus exclusively on the universal roots.

The second level of the domain name, YYY, is a sequence of up to twenty characters which may be letters, numbers, or hyphens. (Other characters like underscores, exclamation points, or periods are not permitted.) Up until July 1995, when Internic revised its Policy, applicants were entitled to register any such YYY value on a first-come basis. Intellectual property owners who felt that a registered domain name infringed on their trade name or mark had no
recourse with Internic. Either they negotiated a deal with the infringers, or sued in court. As most of these suits settled quietly out of court, the legal status of infringing domain names was always murky.

Internic recognised this problem and its own potential liability under the Lanham Act for complicity in trademark infringement. Thus, in July 1995 it implemented a Domain Name Dispute Resolution Policy, whose name has since been truncated to the Domain Name Dispute Policy as it does not purport to “resolve” any disputes.

To register a domain name with Internic under this Policy, a potential registrant must (i) select a suitable name not already registered by somebody else; (ii) arrange to have two operational computers—a main one and a backup—actively connected to the Internet to “host” or answer to the domain name; (iii) pay Internic an annual fee of $50, the first two years ($100) due at registration; (iv) sign a Domain Name Dispute Policy agreement with Internic (see section 3). Many commercial services will register a domain name and provide the requisite host computers for a one-time setup fee and a periodic service charge for use of their host computers. The lowest cost providers, such as pair-Networks at “www.pair.com,” charge $60 for the original setup (not including the $100 Internic registration fee), and $30 per month service charge. At the more upscale end, Netnames U.S.A. at “www.netnamesusa.com” will register your name in the “Top 40 Global Markets” for $7000. The Top 40 includes the geographic domain names of all the industrialised countries, and many others.

The ease and relatively low cost of registration of domain names has led to widespread registration of famous trademarks as domain names. To the dismay of aspiring registrants, including long time trademark owners, many famous domain names have been registered by unrelated individuals or competing businesses.

Entrepreneurs envision Internet as a giant shopping mall, and domain names as storefronts within this mall. With a realtor's mindfulness of “location, location, location,” investors are staking claim on as many attractive (and mundane) addresses as quickly as possible. Driven by this commercial interest, the number of registered domain names, like the number of Internet users, has grown exponentially. In 1993, there were 300 registrations per month. By 1994, there were 1300 per month. Presently, in 1996 there are 25,000 registrations per month. (See the “Internet Domain Survey” by Network Wizards available at <http://www.nw.com/zone/WWW/report.html>.)
As a result, the competition even for innocuous domain names has become stiff. For instance, the author and a few Stanford graduate students started a weekend company a few months back with the rather unassuming name of “Amart Company” with the intention of using “amart.com” as our domain name. Unfortunately, on June 25, 1996, just a few days before we turned in our registration paperwork, another company in Ohio, Amart Communications, Inc., registered the name.

All domain name conflicts (at least the ones drawing significant attention) have arisen within the “.com” tree. This is because only the “.com” tree is overcrowded. For example, between August 1993 and June 1996, Internic reports 394,865 “.com” domain name registrations verses only 2678 “.edu”, 27,377 “.org”, 16,100 “.net”, and 448 “.gov” registrations. In the same period, there were only 232 “.us” and 175 “.other-country” registrations. (See Internic’s statistics report at <http://rs.internic.net/nic-support/nicnews/stats.html>.)

A check of Internic’s online listing <http://rs.internic.net/cgi-bin/whois> of domain names registered with Internic quickly reveals how crowded the “.com” tree is. Registered domain names include everything from the obvious to the innocuous, the racy to the mundane. A sampling of some registered domain names are:

- “microsoft.com” registered by Microsoft Corporation in Washington;
- “coke.com” (on hold) by Rajeev Arora in California;
- “uncola.com” by United Nephologists and Climatologists of Los Angeles in California;
- “v8.com” by Q-Data Online, Inc. in Florida;
- “mmm.com” by 3M Company in Minnesota;
- “olympics.com” by IBM Global Network in New York;
- “doggie.com” by BT Lion, Inc. in Illinois;
- “usa.com” by Lansoft U.S.A. in Ohio;
- “russia.com” by Paley Communications in Washington;
- “taiwan.com” by China Internet Corporation in Hong Kong;
- “megabucks.com” by Mega900 Communications Inc. in Delaware;
- “goldrush.com” by Goldrush World Access in California;
- “money.com” by Money.com, Inc. in Massachusetts;
- “nazi.com” by Collegiate Mall in Utah;
- “sex.com” by Sporting Houses Management Corporation in California;
“xxx.com” by No Inhibitions in California;
“dirty.com” by Chris Leslie in New York;
“hookers.com” by Jerry Schwartz in Idaho;
“queers.com” by On Computer Lab in California;
“burgers.com” by CKE Restaurants, Inc. of California;
“fries.com” by Hearty Hamburgers Fast Food, Inc. in Canada;
“sushi.com” by Robert Silvers in Massachusetts;
“potato.com” by Connect-Ed Inc. in Colorado;
“law.com” by LAW/Net Inc. in Florida;
“smith.com” by Smithcom Inc. in Missouri;
“john.com” by John Little in California;
“jane.com” by Jane Chronis in New York;
“doe.com” by Doe NetMail, Inc. in California;
“nerd.com” by PCS, Inc. in Louisiana;
“stanford.com” by CRL User Slip in California;
“boring.com” by Boring Business Equipment in Florida;
“yawn.com” by Yawn E-mail Service in Canada;
“amart.com” by Amart Communications in Utah;
“kenton.com” by CSD Internetworks (location unlisted);
and “yee.com” by Yee Irving Trust in Massachusetts.

As for generic words, not only has “generic-word.com” been taken, but also most of its obvious variations. For instance, the popular name “Lucky” shows the following registered variations:

“lucky.com” registered by Lucky's BBS in New York;
“luckys.com” by Lucky Ducks 'n' Dogs in California;
“luckydog.com” by LuckyDog Services in Washington;
“lucky7.com” by Alchemy Communications Inc. in California (name on hold);
“lucky32.com” by Lucky 32 in North Carolina;
“lucky-charms.com” by Lucky Charms Brand Group in Minnesota;
“luckyduck.com” by Lucky Duck Interactive in California;
“luckylove.com” by Lucky Love Entertainment (no location listed);
“luckystar.com” by Lucky Star Consulting in California;
“luckystarln.com” by Lucky Star Enterprises in California;
“luckydogbooks.com” by Lucky Dog Books in Texas;
"lucky-lotto.com" by Lucky Lotto Corp. in Canada; and “luckyluke.com” by Lucky Luke Licensing S.A. in Switzerland.

In total, at the time of this writing there are 17 second-level domain names in the “.com” first-level containing the string “lucky.”

3. Internic’s Domain Name Dispute Policy

The domain name system was developed in the early 1980s at the University of Wisconsin. The Internic was created in response to a project solicitation for an Internet administrator by the National Science Foundation (NSF) in 1992. NSF eventually awarded a contract effective January 1, 1993 to Network Solutions, Inc. (NSI), a corporation headquartered in northern Virginia. The contract, called the “NSF Cooperative Agreement,” provided NSF funds to NSI and authorised NSI, through Internic, to be the registrar of nongeographic domain names, and to assign IP network numbers and Autonomous System Numbers. (See the NSF Program Solicitation #NSF 9244 available at <http://rs.internic.net/nsf/solicitation.html>.) Unlike the assignment of domain names, assignment of IP and Autonomous System numbers has not become controversial.

The NSF Cooperative Agreement also authorised AT&T to oversee the Internic directory and database services project, and General Atomics to manage information services. In 1995, the NSF removed General Atomics from the Cooperative Agreement. NSI and AT&T operate Internic through 1998, when the Agreement is up again for review by NSF.

Since this note focuses exclusively on the registration of domain names, with which AT&T has no involvement, I shall refer to NSI, the administrative overlord of Internic, and Internic itself interchangeably.

In July 1995, Internic issued a “Domain Name Dispute Policy Statement” (DND) in response to a surge of trademark disputes stemming from the unfettered registration of domain names. Any breach of this Policy, modified in November 1995, (DND Policy (Revision 01) is available at <http://rs.internic.net/domain-info/internic-domain-4.html>) by a registrant allows Internic to terminate the registrant’s domain name on 30 days' written notice. In addition to selecting an available name, paying the registration fee, and specifying two operational host computers (as described section 2), the main elements of the DND are as
follows. DND requires that an applicant sign a form certifying her intent to (a) use the
domain name regularly; (b) that she does not seek to use the name for an unlawful purpose;
and (c) that the applicant does not seek to use the name with or infringe the legal rights of any
third party in any jurisdiction with respect to “trademark, service mark, trade name, company
name, or any other intellectual property right.”

The DND further requires applicants to agree in writing to a pre-established procedure in the
event of a domain name dispute. The essence of the procedure is as follows. Suppose that A
is the holder of “YYY.com” and B writes a letter to Internic asking to register “YYY.com.”
First, assume A does not have a trademark registration for “YYY.” Then:

As long as B also does not have a trademark registration on YYY, A has
nothing to worry about---Internic will refuse B's request for a “YYY.com”
since it has already been taken by A.

If B has a valid trademark registration on YYY, and can convince Internic of
this, Internic will mail a “30-day letter” informing A that she will
automatically lose “YYY.com” in 30 days unless A can prove to Internic she
too owns a valid trademark registration on YYY. Furthermore, if A does
register YYY within 30 days (for instance, by obtaining a trademark
registration from one of the countries which grants express registrations)
Internic will require A to sign an agreement within 14 days indemnifying NSI
against any legal expenses or damages resulting from A's continued ownership
and use of “YYY.com.” At its discretion, Internic may also require A to post a
bond to guarantee the indemnification agreement.

Second, if A does hold an existing trademark registration on YYY, then things are slightly
better, but not much better, for A:

As long as B also does not have a trademark registration on YYY, A has
nothing to worry about---Internic will refuse B's request for a “YYY.com”
since it is already occupied.

If B also has a trademark registration for YYY, even if it was granted after A's
registration of “YYY.com,” Internic will send a 14-day letter requiring A to
sign an indemnification agree or post a bond---or both, at Internic’s discretion---or lose its domain name.

Note that in the above, it is the actual trademark registration (the piece of paper issued by a national trademark office) that forms the basis of Internic’s policy. Whether the parties hold a valid (but unregistered) trademark at common law that would be recognised by the courts is not taken into consideration by Internic’s policy.

The Internic’s DND Policy seeks to pass the financial burden of domain name disputes to the disputants and to indemnify Internic against legal costs. However, the DND does this by imposing the Internic into the middle of trademark/domain name disputes with 30-day and 14-day letters and indemnification requirements.

3.1 Revision of Internic DND Effective September 9, 1996

Recognising that many shortcomings of its DND Policy, Internic has been actively seeking to revise and improve the current arrangement. On September 9, 1996, Revision 02 (available at <http://rs.internic.net/domain-info/internic-domain-6.html>) of NSI's Domain Name Dispute Policy became effective. While it signals substantial changes to how Internic will handle domain name disputes from now on, Revision 02 leaves intact most of the basic registration procedure. Second level domain names continue to be registered on first-come first-serve basis. NSI does not determine legality of registered domain names. Applicants must represent that registration of the domain name does not interfere with any rights of third parties, and that the domain name is not being registered for any unlawful purpose.

However, Revision 02 incorporates substantial modifications to Internic's Policy in the event of a dispute. NSI stipulates that it will no longer act as arbiter of disputes and does not confer any rights upon complainants. Before requesting NSI to take action pursuant to the Policy, a trademark owner must now first directly notify the domain name owner that his registration and use of the domain name violates the trademark owner's rights. NSI may take action after being provided with a certified copy of a relevant federal trademark registration and a copy of the notice provided the domain name registrant. In those instances when a domain name registrant is permitted by Internic to continue use of his domain name, he will be not required to provide indemnification beyond damages resulting from the registration and use of the
disputed domain name; **indemnification for NSI's legal expenses is not required.** Moreover, the bonding requirement has been deleted.

Furthermore, NSI will now accept a domain name registrant's trademark only if it was registered **prior** to the date of NSI's request for proof of ownership or any third party's notification of a dispute to the registrant, whichever is earlier. If a law suit is filed prior to the domain name being placed on hold, NSI will not place the domain name on hold and will deposit control of the domain name into the registry of the court.

Finally, NSI promises to abide by all court orders without being named as a party to a law suit.

A domain name owner's rights under Revision 02 are stronger than under Revision 01. With a relaxed indemnification requirement and deleted bonding requirement, domain name owners are no longer burdened with the possibility of having to post discretionary bonds in order to keep their domain name. In event of a law suit, NSI will transfer control of the domain name to a court of law rather than automatically place the name on hold as a matter internal procedure. Thus, domain name disputes will be settled by the courts just like other traditional property disputes.

However, Revision 02 still involves NSI in domain name disputes. In the absence of a law suit, NSI will still intervene by placing a domain name on hold if a trademark owner complains—-independent of any legal adjudication of whether the domain name actually infringes on the trademark presented. Indemnification for damages is still required. Thus, Revision 02 is likely to continue NSI's involvement in law suits and, accordingly, it is likely that Revision 02 will subject to further changes.

### 3.2 Nongeographic Root Names Galore

In early 1997, the Internet Society’s International Ad Hoc Committee has mandated the creation of seven new Internet domain names, including “.firm”, “.store”, “.web”, “.rec”, “.info”, and “.nom” for, respectively, firms, retailers, web businesses, recreational activities, information publishers, and personal nomenclature. Joining the party will be 27 additional new companies (in addition to Network Solutions) having the right to register domain names. The new names should be in place by the end of the year. (Wall Street Journal, 6 February 1997.)
4. Disputes

Domain name conflicts arise from two types of sources. First are accidentally caused conflicts due to properly similar trade names or marks. For instance, while a Roadrunner computer company and a Road Runner cartoon character may properly coexist in the trademark world, there is only one “roadrunner.com” address on the World Wide Web. An accidentally caused conflict arises when the computer company and Time Warner Inc., the owner of the cartoon character, both want the “roadrunner.com” domain name. Second are intentionally caused conflicts motivated either by trademark piracy or address speculation (name grabbing). This section describes both types of conflicts and illustrates them with recent cases.

4.1 Accidentally Caused Conflicts

Many collisions between different applicants wanting the same domain name arise innocently. Unlike the traditional trademark ecosystem, where identical trademarks can coexist in different markets without interfering with each other, there can be only one domain name “smith.com” on the World Wide Web. Thus, while a Smith Pharmaceutical, Inc., a Smith Medical Instruments, and a Smith Ventures investment group may properly coexist in the real world, they cannot all live at “smith.com” on the Web.

One solution is to bifurcate the universal root “.com” into “.pharm” (for pharmaceuticals), “.metal” (metals and alloys), “.med” (medical and surgical), “.bev” (nonalcoholic beverages), “.toba” (tobacco), “.biz” (business), etcetera, according to the classes set forth by the Arrangement of Nice for the International Classification of Goods and Services, an Arrangement to which the United States adheres. In principle, this would enable Smith Pharmaceutical, Smith Instruments, and Smith Ventures to coexist on the Internet respectively as “smith.pharm,” “smith.med,” and “smith.biz.”

While bifurcation certainly alleviates many of the collision problems in the overcrowded “.com” domain, it would not solve it. Due to the international nature of the World Wide Web, accidentally caused collisions may still occur in two ways. First, there could be still, properly, two Smith Instruments vying for “smith.med”, for instance, one American and one Australian. Second, not all countries adhere to the Nice Arrangement, and companies whose
marks are properly registered in the non-Nice countries may find themselves in an accidentally caused conflict under a Nice Arrangement of root names.

A brute force solution would be to give up on nongeographic roots, and use an extended geographic system consisting of roots like "pharm.us," "med.us," "biz.us," etcetera for the American registration, and similar German system based on "de," and so forth for every country that wants to have a system. Then the individual countries would be able to assign domain names based on the trademark and trade name ownership within those countries. As in the trademark arena, multinationals like IBM, Coca Cola, and McDonalds (or, more precisely, their lawyers) will then spend a lot of time registering and trying to protect its domain name portfolios in all countries around the world.

With regard to the consequences of Internic's DND Policy, the company who registers "smith.com" first gets squatter's rights to it provided it can afford to indemnify Internic. As a practical matter, the disputing companies will either negotiate a settlement with each other, or end up in trademark litigation.

In an early case, a small New Mexico-based computer company named for New Mexican state bird, Roadrunner Computer Systems Inc. (RCSI) of Santa Fe, registered "roadrunner.com" on May 18, 1994 and has used the domain name to offered Internet services. Unfortunately, "Road Runner" is a federally registered trademark name of the popular Time Warner Inc. cartoon character. Time Warner asked Internic to put a hold on RCSI's use of "roadrunner.com" alleging that the computer company's use of the domain name infringed Time Warner's federal trademark rights in "Road Runner." On December 13, 1995, pursuant to its DND Policy, NSI required RCSI to indemnify Internic against all potential legal claims arising from the use of "roadrunner.com" or have its domain name put on hold until resolution of the dispute.

In response, RCSI obtained a trademark from the Tunisian trademark office on March 8, 1996, and filed suit against NSI in federal court. Roadrunner's complaint alleged that NSI has breached its duty to RCSI, a third-party beneficiary of the Cooperative Agreement between NSF and NSI, by implementing the DND which "unfairly and arbitrarily denies a registrant the continued use of its domain name." RCSI also raised a detrimental reliance issue based on its pre-existing use of "roadrunner.com" as well as an intentional interference with contractual relations issue. RCSI's complaint asked that NSI lift the hold on "roadrunner.com" and that NSI be compelled to "develop new policies that will provide fair
In a letter to Internic, RCSI noted that: (i) Time Warner's trademark consists of two words, not the compound word "roadrunner"; (ii) RCSI had used "roadrunner.com" for more than a year before the challenge; (iii) Time Warner had registered the trademark in conjunction with toys, whereas RCSI offered computer services and not toys; and (iv) RCSI's over 500 online clients with "roadrunner.com" electronic mail addresses would be greatly inconvenienced if the domain name was lost.

NSI's answer to the complaint asserted that RCSI voluntarily signed its DND agreement during registration, constructively reaffirmed its agreement by its continued use of the domain name and, in any event, that NSI is not the proper defendant in a trademark dispute between RCSI and Time Warner. Further, NSI counterclaimed for a declaratory judgement to validate its DND Policy in general and its actions in this particular case.

In a further manoeuvre, Internic requested that Time Warner certify that RCSI's continued use of "roadrunner.com" would cause Time Warner legal damages. When Time Warner refused to certify damages, NSI retracted its hold on "roadrunner.com" because, according to NSI's Internet Business Manager (PR Newswire, June 24, 1996, Monday.), "Network Solutions does not invoke the Policy unless a trademark owner asserts that someone's registration and use of a domain name is causing them the trademark owner legal harm."

Despite this favourable turn of events, RCSI continued its lawsuit, insisting it had been harmed by the original challenge and that legal issues remain unresolved. In the end, the court granted NCI's motion to dismiss RCSI's suit. RCSI still uses "roadrunner.com" as its Web address.

4.2 Intentionally Caused Conflicts

Intentionally caused conflicts arise in two ways. First, competitors have registered the famous trademarks of their competitors for their own domain names in the hopes of pirating their competitor's business and goodwill by misleading consumers who chance upon their misleading Web address. In a prototypical case, Princeton Review, a provider of training for standardised university entrance exams, registered "kaplan.com". Kaplan Education Center is Princeton Review's primary competitor. When Kaplan decided to set up a web site, it learned
that Princeton had beaten it to the punch. The matter went to arbitration, and ultimately Princeton relinquished the domain name. In another relevant case, Carnetta Wong Associates registered “avon.com.” Avon Cosmetics brought an action in the United States District Court for the Eastern District of New York accusing Carnetta Wong Associates of unfair competition, trademark infringement, misappropriation, trademark dilution, and deceptive acts and practices. This case is particularly notable as one of the first complaints alleging a violation of the new Federal Trademark Dilution Act (described in section 7.1). Avon has successfully reclaimed the domain name “avon.com.” A summary of the Kaplan and the Avon cases are given at Georgetown Law School’s web site at <http://www.law.gwu.edu/lc/internic/recent/rec2.html>.

Second, and more flagrantly, domain name speculators have registered portfolios of famous trademarks as domain names for investment purposes because certain domain names are worth a lot of money to big companies.9 San Francisco trademark counsel Melville Owen reports that a potential client had forty names registered with NSI. (Slind-For V, 1996) “What he did was to take the name of a famous company, create an acronym containing that name, and work backward,” Mr. Owen explained, to justify using it. The would-be client wanted Mr. Owen “to help him negotiate the sale of these names for hundreds of thousands of dollars. It was simply an extortion plot, and I was shocked to see what he was trying to do.”

Finally, it is amusing to note that due to commercial speculation, it is highly unlikely that any readers of this note will be able to register the name “reader's-surname.com.” This is because virtually every popular surname has already been registered. One company in Vancouver at <http://www.mailbank.com/> has spent US$1,000,000 to register ten thousand domain names relating to popular North American family surnames. According to their site, they own such names as “TheSmiths.com” (but not “smith.com” which had been previously registered by someone else). This company intends to provide personal electronic mail addresses to private individuals like John Smith who might want an address like “john@TheSmiths.com”.

5. Comparing Domain Names and Trademarks
Ownership of real estate entitles the owner to two basic and perpetual rights: a right to exclusive occupancy, use, and development of the land, and a right to sell or license the ownership rights or the fruits of the land.
There are three economic reasons for granting perpetual and exclusive ownership rights in real property. (Posner, 1992, pp. 32-38) First, recognising ownership avoids wasteful repeated disputes over who is entitled to a plot of land. The more limited is the supply of land relative to demand, the more potential disputes there are, the greater are the benefits of recognising ownership. Second, ownership facilitates best use of land: owners who are vested with the value and fruits of their land are motivated to develop their land to its best use. Third, ownership facilitates the assignment of each plot of land to the person who values it most. If owners can sell their land to the highest bidder, in a perfect market each land owner is someone who benefits from (and thus values) her land at least as much as the highest bidder is willing to pay---otherwise she would sell it to the highest bidder. Thus, nobody who values a piece of land less than another person would continue to own it because she can get a surplus by selling the land to that person who values it more.

As was described in section 2, domain names are presently protected under trademark law, not real property law. In this section, I describe the similarities and differences between domain names and trademarks. I shall submit that domain names have more elements in common with real property than with trademarks or with other forms of intellectual property.

5.1. Economics of Trademarks

At present, rights to domain names are protected in the United States mainly under only trademark law. A trademark is a “word, name, symbol, or device, or any combination thereof ... [used] to identify and distinguish his or her goods, including a unique product, from those manufactured or sold by others and to indicate the source of the goods, even if that source is unknown.” (15 USC 1127(1996).) A service mark takes the same form and serves the same purpose for services. “Titles, character names, and other distinctive features of radio and television programs may be registered as service marks[.]” (15 USC 1127(1996).) Trade names are names used to identify a person's business or vocation. (15 USC 1127(1996).)

Whereas the PTO grants federal registrations for marks while no federal agency registers trade names, the Lanham Act offers essentially equal protection for both marks and names. Thus, for most practical purposes, there is not much significant legal difference in federal law between trade name and mark protection. However, for domain name purposes the focus has been entirely on trademarks (rather than trade names, which might be considered more
The Lanham Act prohibits the misappropriation of trademarks and service marks used in interstate commerce. Any person who in connection with any goods or services uses a mark in a way which “is likely to cause confusion ... as to the origin, sponsorship, or approval of his or her goods, services, or commercial activities ... shall be liable in a civil action by any person who believes that he or she is or likely to be damaged by such act.” (15 USC § 1125(a) (1996).) Furthermore, any goods or services marked or label so as to cause confusion as to the origin, sponsorship, or approval “shall not be imported into the United States.”(15 USC § 1125(b) (1996).)

The legal protection of trademarks has a long history. Craftsmen marked their pottery since the ancient times. While the original utility of marks was to identify the source for fraud claims if the product did not meet the advertised quality standard, this been turned on its head. More than identifying the maker, marks have come to identify the quality of products associated with particular makers. By the beginning of the twentieth century marks were understood to be useful in identifying the quality standard of their owners. Presently, a trademark typically identifies a product and its quality—the actual identity of a product's source is probably only secondary in consumer's minds.(Goldstein P, 1993 pp.16-17) For instance, when a consumer buys a used Toyota, he probably does not worry too much about whether it was manufactured in Tennessee by an American subsidiary of Toyota or in Japan by the parent company. What the consumer knows is that the Toyota mark is associated with certain characteristics that Toyota owners have come to expect.

Trademarks are a form of restricted property. Unlike the rights granted a fee simple holder of real property, the rights accorded a traditional trademark owner is limited to protecting against consumer confusion. In other words, traditional trademark protection focuses on consumers rather than the trademark owner. Accordingly, trademarks are traditionally protected only to the extent that they serve to identify and distinguish one merchant's goods or services from those of another.

Legal trademark protection is justifiable from an economic standpoint. Sellers generally have better information as to unobservable features of a commodity for sale than potential buyers. Marks reduce this information asymmetry between sellers and buyers by enabling potential buyers to rely on knowledge about the mark's reputation to aid in evaluating a marketed
In identifying and distinguishing one seller's goods from the goods sold by others, marks (1) signal to consumers that all goods bearing a particular trademark originate from or are controlled by a common source, (2) suggest that all goods bearing the same trademark are of the same quality, (3) may play a substantive role in advertising or drawing attention to the product or service.

In economic language, the “total price” of a product or service is the store price plus the buyer's search costs. Search costs consist of the buyer's expenditures of time and effort in locating and identifying the product or service as the one he seeks. The use of marks reduces the total price by lowering search costs.

The use of marks comes with important economic side effects, both good and bad. Marks encourage the maintenance of quality and consistency by sellers who try to boost profits by increasing and preserving consumer confidence in their mark. In seeking to increase the influence of their mark on consumers, however, sellers have a perverse incentive to over advertise and create an unjustified high regard for their mark. Moreover, sellers may find it more profitable in the short run to inflate a mark and mislead consumers rather than to enhance the actual quality of the marketed product or service. The costs of over advertising and of being misled into buying the wrong product are ultimately born by consumers. Therefore some of the benefits from reduced search costs and enhanced product quality are diminished by the perverse incentives, which tend to increase the total price of marketed products or services.

Courts have long recognised that trademarks are not rights in gross or at large like the other forms of statutory intellectual property, copyrights or patents. From an economics perspective, this is not surprising because patents and copyrights are rights granted to reward past performance, whereas marks are granted to protect ongoing use by owners and consumers. In contrast to trademarks, patents and copyrights are (i) time limited (ii) monopolies (iii) which may be assigned or licensed.

In contrast, trademarks are afforded Lanham Act protection for and only for the duration of their useful purpose in commerce. Restricting trademark ownership in this way is efficient because there is a finite number of potential trade names and marks, and it is inefficient to permit hoarding by suboptimal users.
In this regard, marks may lose their legal protection in two ways: abandonment and genericide. A mark which has been abandoned by its owner (e.g., ceased to be used in commerce) loses its legal protection and becomes available for adoption by a new owner to use for his own purposes. On the flip side of abandonment, a mark suffers genericide when it has been popularised to the point of becoming a generic term whose principal significance to consumers is as reference to a “nature or class” of a product or service rather than to its particular source or quality. A mark suffering genericide becomes incapable of identifying or distinguishing its source or quality and becomes incapable of serving as a source or quality signaller. Furthermore, giving one owner a monopoly on a generic name forces competitors, who then must avoid the generic name, to assign their products awkward names, which increase the search costs of consumers looking to compare competing products. Accordingly, marks suffering genericide such as “aspirin,” “cellophane,” and “yo-yo” have lost their legally protected status as intellectual property. This treatment of abandonment and genericide of marks are both consistent with the economic goals of providing information to consumers and providing protection to marks only to the extent that they actually promote consumer needs.

For similar reasons, trademark owners do not hold an absolute monopoly on their mark: others in separate geographic, product, or service areas may use overlapping marks provided their use does not confuse consumers.

In a sense, the driving purpose of trademark law and real property law are the same: putting limited resources, real estate or catchy words or logos, to their best use. Like fee simples in real property, marks can be held indefinitely (or as long as the owner puts her mark to good use or at least defends her rights to it). The abandonment and genericide restrictions on trademark protection are reminiscent of adverse possession in real property. From an economics viewpoint, abandonment, genericide, and adverse possession optimise social welfare by removing from owners the property rights which they do not make adequate use of.

5.1.1 Restrictions Against Trademark Transferability

In the United States, a trademark cannot be assigned or sold unless it includes the goodwill of the business symbolised by the mark. Moreover, a trademark cannot even be licensed in the United States unless the owner has the right to—and actually does—control the nature and quality of the goods or services of the licensee.
It is commonly said that such restrictions against the sale or transfer of marks are economically efficient because unfettered transferability would defeat their source-indication and quality-indication purposes. While this rationale makes sense superficially, whether it is sound or not is debatable. (Landes W and Posner R, 1988 p 284) Suppose A is a higher quality and B a lower quality producer competing in the same marketplace and suppose A’s cost of production is accordingly higher than B’s. Also, suppose that A has a famous mark which indicates his higher quality. How do restrictions against transferability augment social welfare in this example? These restrictions might prevent A from licensing his mark to B so that B can sell his cheaper products at the same price as A’s higher quality products. However, if A was interested in profiting by deceiving consumers in this way, transferability restrictions do not prevent A from producing the cheaper products himself and marketing them under his own mark.

In any case, the damages caused by the transfer of a high quality producer's mark to a low quality producer is limited because consumers will eventually wise up to these attempts at deception. If A transfers his mark to B, the market will realise this in the long run and A’s mark will be suitably diluted. In fact, ideally consumers will incorporate the mere risk of such deception into their interpretation of A’s mark. If A is a new mark holder with no demonstrated record of never transferring its marks to inferior producers, its mark would be worth according less to consumers and, thus, also less to potential mark purchasers. Hence, to cultivate marks with high resale value, A would have to establish a record in the eyes of consumers of transferring, if at all, only to producers of equal or higher quality products and services.

Superficially, there appears to be one loophole in the above discussion: the endgame. If A is going out of business, it would not care about maintaining confidence in its marks. Thus, it may seem that restrictions on transferability serve to prevent producers of inferior goods and services from deceiving consumers by purchasing marks from high quality producers who are going out of business and, thus, can sell to inferior producers without reprisal. The chink in this reasoning is as follows. A retiring business which cannot transfer its famous marks has no choice but to abandon them. Nothing prevents other producers from quietly recycling these abandoned marks for use with inferior products and deceiving consumers.

In summary, restrictions on the transferability of trademarks do not seem to further any useful purpose that raw market forces cannot accomplish automatically in an ideal world.
5.2. *Economics of Domain Names*

Domain names share a fundamental attribute with traditional trademarks. Like trademarks, they serve as a public signalling device to identify and associate sites with particular sources of products and services.

However, domain names also differ from trademarks because, whereas a trademark has no utility beyond its information content, a domain name, like a telephone number or street number, has utility value as an address. Armed with a domain name, a potential customer can make contact and transact with the supplier.

Because of their utility as addresses, domain names are akin to real estate where location is the key to value. For instance, to access news on the Web, I do not need to look in a directory for Web addresses because it is easy to remember or guess that the CNN and Wall Street Journal addresses are “cnn.com” and “wsj.com.” In contrast, a domain name like “cgefhik.com” would not be so easily recall or guessed and identified, and as a result would have less success attracting foot traffic.

Companies can also benefit from having location location on the World Wide Web in a second way. Like having a prestigious downtown address, having an attractive and famous domain name inculcates credibility with customers, and signals to the market that the company is serious about its business on the information superhighway and also, by implication, that it is serious enough about its Web business to invest in obtaining a good address.

On the side of this, a company that permits someone else to pirate its natural domain name suffers in at least two ways. First, its trade names and trademarks associated with the pirated domain name is subject to dilution (more about dilution in section 7.1). Second, allowing a pirated domain name to exist suggests to the public that the company either places low priority on the World Wide Web or, worst, lost the use of the name due to ineptitude.

The economics of domain names is reminiscent of the economics of real property. Like real property (and unlike trademarks), each domain name can have only a single owner. Like real property, there are a limited number, less than the number of want-to-be owners, of attractive
domain names. Like real property, it is socially beneficial to encourage owners to invest in cultivating and developing their domain names. And, like real property (and unlike trademarks), domain names have utility value as a storefront address at which an organisation can communicate and transact with the public.

As in real property, transferability of domain names would decrease domain name piracy in that the owner who can make the most profitable (best) use of the domain name ultimately would buy and own it (as described in section 6). In the idealised instance, the optimal owner would then invest more a than the random owner to protect his investment against piracy because, as the story goes, owners only will spend enough to maximise their own profits. Hence, an owner who can make better use of (read: higher profits from) a domain name will be willing to spend an accordingly greater amount to protect his investment than an owner who is making lesser use of the domain name. Since optimal owners guard their names better than random owners, domain names would be less confused and better protected against piracy under a transferable domain name system than under the inalienable system we currently have.

At the risk of belabouring this point, one can draw an interesting analogy to real estate. If real estate were inalienable, I will have very little incentive to protect my Massachusetts home against squatters should I get a permanent job in California. Without plans of returning to live in Massachusetts, once I move to California the Massachusetts home has very little economic value to me. Why spend additional money to protect and take care of what I won't ever use again? From this viewpoint, inalienability of real estate would be an open invitation to squatters. On the other hand, if I have the right to sell my Massachusetts home, then I will have every monetary incentive to continue protecting and taking optimal care of it to maximise my eventual sales price.

But what about rentals? Even in an inalienable real estate regime, I might still put my Massachusetts home out for rent (as a domain name owner might currently do with a domain name) and thus circumvent inalienability. If a nonalienating homeowner in California can still extract an income stream from his Massachusetts home by renting it out, won't that encourage him not only to continue caring for his Massachusetts property but also to seek out the optimal tenant who would be willing to pay the most rent? The problem here is the problem of perverse incentives. The optimal user might be an ambitious developer who wants to invest in revitalising the whole neighbourhood by upgrading not only the home but in developing the whole surrounding areas. Such a huge investment of time and effort is
unlikely to be undertaken a temporary renter---if he succeeds and the neighbourhood is revitalised, his potential gains will be wiped out by skyrocketing rents.

Similarly, domain name renters have perverse economic incentives against promoting and developing a rented Internet location. A renter is too much at the mercy of his landlord. If the rented location becomes too popular, landlords will either want to raise the rent or re-rent to a higher bidder. Thus, a domain name renter does not have unfettered incentives to invest in properly advertising and promoting his Internet address.

In summary, domain names are like real property in many respects, and domain name owners should be accorded stronger property rights for the sake of economic efficiency. In the remainder of this note, I shall discuss how this might come about.

6. Property in a Nutshell

Property norms in human societies range from the simplest unspoken conventions, such as not cutting into the middle of a grocery store queue, to much more sophisticated rights bundles expressed in the Common Law. A broad range of viewpoints (Rose C, 1985 pp. 79-81), ranging from Locke's labour-mixing theory of property to law and economics may be called upon to justify them. Legal property rights can be enforced by various combinations of liability and injunctive remedies (Calabresi G and Melamed D, 1972).

Intellectual property is a generic term typically referring to property rights in ideas and information---intangible things. Examples of intellectual property include copyrights, trade marks and names, patents, trade secrets, and publicity rights. In the United States, these rights may either be encoded in federal or state statutes, or recognised by the courts as a part of the common law, or both. From a utilitarian point of view (the view I am taking in this article), there is really nothing which fundamentally distinguishes intangible or “intellectual” property from property in general, including “real” property (the ownership of real estate).

Perhaps the most significant difference between real and intellectual property rights is in the motivation for granting them. As previously discussed, the reason for granting real property rights is to encourage optimal use and development of a piece of property by existing and future owners. In contrast, ideas and information are indivisible: an unlimited number of consumers can enjoy an idea without depleting it. Thus, it would seem optimal to enable
the most unfettered widespread use of each idea by not granting any intellectual property rights at all to it. However, this consideration is balanced against the need to motivate authors and inventors to create more new ideas in the future. Thus, intellectual property rights are recognised not to promote development of an existing idea but, rather, to reward past performance and, in doing so, to provide incentives for future innovation and creation of new ideas. The result of balancing these two considerations is to grant intellectual property rights not in perpetuity (as are fee simples in real property) but only for a limited duration (for instance, something like not more than 50 years plus the life of the author for copyrights in the United States).

Whatever the justifications, most property rights (both intellectual and real) bundles consists of two principal elements:

(a) Prior Possession, the right to occupy or possess what one owns and to exclude others from occupying or possessing the same, and
(b) Transfer, the right to buy and sell ownership.

From this atomistic point of view, not much is different between real or intellectual property.

6.1 Prior Possession

The prior possession element of property theory has a crucial utilitarian virtue. Usually attached to a clear act and public notice requirement, prior possession establishes a publicly known asymmetry in otherwise symmetric dispute situations. This asymmetry provides an objective criterion to facilitate the resolution of disputes: by favouring existing possessors the norm of deference to prior possession presents a predictable and cost-free means of resolving disputes between occupants and intruders.

The utilitarian value of possession was appreciated early on by the courts. In *Pierson v. Post*, (3 Cai. R. 175 (N.Y. Sup. Ct 1805).) a famous wild-fox case from the nineteenth century, Post, a hunter, had a fox in his gunsight but before he could fire an interloper killed the fox and ran off with the prize. The indignant Post sued the interloper for the fox's value on the theory that his pursuit of the fox established his right to have it. The court disagreed. It held that possession requires a clear act putting the world on notice that the “pursuer has unequivocal intention of appropriating the animal to his individual use.” (*Pierson v Post* 3 Cai. R. 175 at 178) Gaining property rights over a wild animal requires either establishing physical control over it or mortally wounding it.
6.2 Transferability

Transferability is also utilitarian. This is because if an intruder values a property at $10 while the prior possessor values it at $5, then both would stand to gain if the prior possessor sells it to the intruder for some amount between $5 and $10. For instance, if the sale is made for $7, the prior-possessor-seller is better off by $2 (= $7 - $5) and the intruder-buyer is better off by $3 (= $10 - $7). In such transactions both the possessor-seller and the intruder-buyer net a surplus over the original situation. Thus, such transactions increase the fitness of the transacting participants. As a result, transacting participants tend to become better off than non-transacting ones, and transferability is evolutionarily preferred.

The value of including transferability as part of the package of property ownership rights has long been appreciated. An example from “modern” civilisation is the organisation of the spontaneously organised mining camps during the California Gold Rush. Gold was discovered in California in 1848, right around the time Mexico ceded California to the United States as a condition for ending the Mexican-American War. While Mexican law was immediately abolished by the United States military governor, no legal alternative was offered and, moreover, the military government reduced to a mere 600 men by desertions to the Gold Rush was impotent. California state government did not begin operations until 1850, and did not fund law enforcement for several more years.(Umbeck J.R, 1981)

In the interim 200,000 miners, each seeking to establish advantageous land claims, immigrated to California from all over the world for the Gold Rush. With no legal authority to determine and enforce property rights, at first anarchy prevailed. In this period, every miner carried at least one gun (Umbeck J.R, 1981 p.100) which, in addition to introducing an omnipresent threat of violence, served as a physical equaliser between miners of unequal fighting abilities. Despite all this, in the two-year period 1848-1850 there was a notably low incidence of violence.(Umbeck J.R, 1981 p 142)

Rather than violence to establish mining claims, what emerged in this brief period were regional ad-hoc systems of property rules. Adopted by majority-rule vote of the first miners to arrive in each locale, these rules were imposed on newcomers and enforce by community consensus. The basic ingredients of these primitive rules did not vary much from one district
to the next, and did not change over time. A typical set of rules provided (among other things) that: (Umbeck J.R, 1981 p 94)

- at any instant a person can hold one claim by virtue of occupation, but that it must not exceed 100 square feet;
- a claim if held by purchase must be recorded by a bill of sale certified by two disinterested persons;
- notices of claims must be posted upon the ground chosen, and must be renewed every ten days;
- five days absence from said claim, except in case of sickness or reasonable excuse shall forfeit the property.

Provisions 1 and 2 designating occupancy rights and sales procedures illustrate possession and transferability. Provisions 3 and 4 illustrate related sub-elements: to establish and keep ownership, an owner must continuously exert his ownership rights; conjunctively, the public must have definitive notice of ownership and transfers of ownership, including purchases and sales.

7. Recent Changes in Domain Name Ownership

Presently, domain name ownership is largely based on first come, first serve registration and trademark law. As argued in section 5, trademark law is not wholly appropriate for domain names. The universal nature of the Internet and World Wide Web is inconsistent with the geographic and market segmentation presumed for trademarks. Furthermore, unlike trademarks domain names have utility as electronic storefronts through which customers or clients may approach and transact with a source of products or services. As it is, the present law of domain name ownership is economically inefficient.

This inefficiency drives the growing amount of litigation surrounding and challenging the domain name registration and ownership rules. This litigation is consistent with the observations of Rubin and Priest (see section 1) that economically inefficient rules tend to be challenged and litigated more often than efficient ones. These challenges are inspiring changes in trademark law and in Internic policy and practice. Even if these changes are guided by nothing more than random trial and error, some changes inevitably will hit on efficiency-improving (and accordingly less-challenged) rules. Accordingly, the efficient rules
will tend to persist unaltered whereas the inefficient and will continue to change as they are challenged and reviewed. Over time, this process of natural selection will converge to an efficient set of domain name registration and ownership rules that are seldom litigated or revised.

In this section, I describe some of the recent developments in the rules governing domain name registration and ownership. In one major development, federal trademark law was recently strengthened by the Federal Trademark Dilution Act. A second major development is Internic's recent decision to remove itself from mediating domain name ownership disputes by adopting an interpleader strategy. A third development is Internic's adoption of Revision 02 of its DND Policy. Under Revision 02, domain name registrants who have been challenged by trademark owners are treated less harshly than under Revision 01.

Despite such progress, there is still a ways to go if domain name owners will have rights resembling those of real property owners. Namely, a fourth major development that will be necessary is a mechanism permitting the direct sale or transfer of domain name addresses.

Only time will tell if domain name ownership rights will ultimately realise an economically efficient state. Also, only time will tell if trademark and domain name law remain intertwined, or if domain name law disengages from trademark law and establishes itself as a new area of property law.

7.1 The Federal Trademark Dilution Act

As described in section 5.1, some registrations of a pre-existing trademark as a domain name could be actionable trademark infringement under the Lanham Act, codified at 15 USC § 1125(a)-(b), as consumer source confusion. The Federal Trademark Dilution Act (FTDA) of 1995, appended to the Lanham Act as 15 USC § 1125(c) (1996), extends trademark protection beyond consumer confusion to the reputation of the mark itself. As it is, the FTDA grants owners a right in gross to exclude others from use of their famous mark in all markets, not just within their own market. In granting famous marks such protection, the FTDA promotes famous marks one step closer to real property status.

Dilution is not a new concept. Professor Frank Schecter introduced the dilution doctrine in 1927.(Schecter F, 1927) Professor Schecter urged that protection against dilution be
incorporated into trademark law so that marks could obtain protection as property rights independent of the existence of a likelihood of confusion. While Congress had failed to take any action on Schecter's proposal until recently, dilution law has developed at the state level through common law and, more typically, through statutory enactments.

Dilution focuses protection on a famous mark itself rather than on likelihood of consumer injury. In traditional trademark protection, the focus is in protecting consumers against a “likelihood of confusion.” In contrast, the focus of dilution is not injury to the potential consumer, but injury to the value of the mark itself and its associated good will. While traditional trademark law protects consumers from a likelihood of confusion, the FTDA affords owners of marks an injunctive remedy against newcomers whose marks merely cause “a dilution of the distinctive quality of the mark.” 15 USC § 1125(c)(1)

Under the FTDA, trademark owners must establish four elements for a prima facie case of federal dilution: (1) “commercial use in commerce” by a (2) newcomer using the mark after it has become (3) “famous” in way that (4) has the effect of “diluting” the identifying power of the famous mark.

The requirement that the defendant's use be “commercial use in commerce” involves a two step analysis. First, the defendant must meet the Lanham Act's definition of “use in commerce,” that is, use in the regular course of interstate trade. For goods, this means the mark must appear on the goods or their containers or labels; for services, the mark must appear in relevant promotional materials. Second, the defendant's use must be “commercial,” that is, in speech that proposes “a commercial transaction.” (Virginia Pharmacy Board v. Virginia Citizens Consumer Council Inc., 425 U.S. 748 (1976).) Thus noncommercial speech like in reviews, parodies, and artistic expressions are not actionable under the Dilution Act.

The FTDA lists eight factors for determining whether a mark is famous: distinctiveness, the duration, extent, and geographic extent of its use and publicization, the channels of trade of its use; its recognition in the channels of trade; the nature and extent of similar marks used by third parties; whether and how the mark was federally registered. 15 USC § 1125(c)(1)(A)-(H)(1996) While statute does not specify the relative weights accorded to these factors, these factors are similar to the traditional likelihood-confusion analysis, which may provide guidance on the application of these factors.
The FTDA defines dilution as the “lessening of the capacity of a famous mark to identify and distinguish goods and services, regardless of the presence or absence of: (1) competition between the owner of the famous mark and the other parties, or (2) likelihood of confusion, mistake, or deception.” (15 USC § 1127 (1996).) Thus, the FTDA extends for “famous” marks the traditional Lanham Act protection to providing for claims against non-competing and non-confusing uses if they diminish the effectiveness of the mark.

Historically, courts have recognised three types of dilution: blurring, tarnishment, and disparagement. Dilution by blurring anticipates the “whittling away” of a senior mark owner's mark by use of a similar mark even if on a dissimilar product. In *Jaguar Cars Ltd. v. Skandrani*, 18 U.S.P.Q. 2d 1626 (S.D. Fla. 1991), the court found a likelihood of dilution between Jaguar cologne and the automobile. Dilution by tarnishment occurs when use of a junior mark degrades the senior mark by associating to it an undesirable image. In *Chemical Corporation of America v. Anheuser-Busch Inc.*, 306 F.2d 433 (5th Cir. 1962), the slogan “Where there is life ... there's bugs” tarnished the beer manufacturer's mark “Where there is life ... there's Bud.” Disparagement occurs when a junior user alters the plaintiff's mark in an undesirable way. In *Deere & Co. v. MTD Products Inc.*, 41 E3d 39 (2d Cir. 1994), the junior user diluted the Deere logo by an unflattering depiction of it in comparative advertising.

In addition to defeating one of the four elements of the prima facie case, potential defences against dilution is fair use, as in comparative advertising and first amendment speech. The application of fair use will likely be guided by existing precedent and judicial pronouncements under 15 USC § 43(b). Under that section, the advertising must identify the competing goods or services of the famous mark's owner, and the criticism of the owner's product or services must be fair.

Since marketing goods and services over the Internet is clearly interstate commerce, the FTDA is likely to become important for domain name ownership. As previously discussed, traditional trademark law fails to protect trademark owners from newcomers who register a famous domain name and use the web site for a different purpose with a low likelihood of causing confusion for consumers. Thus, dilution may be the only viable cause of action for trademark owners wanting to register a pirated famous domain name. The legislative history records that Senator Patrick Leahy (D-Vermont) hoped that the statute would “help stem the use of deceptive Internet addresses taken by those who are choosing marks that are associated with the products and reputations of others.” (The American Lawyer, May 1996)
The FTDA has already been tested in several cases. (See list at <http://www.law.gwu.edu/lc/internic/recent/rec2.html>) In Hasbro v. Internet Entertainment Group Ltd., Hasbro alleged that defendant's domain name “candyland.com” infringed on Hasbro's trademark in the children's board game Candy Land. Hasbro argued that operation of defendant's site, which featured adult entertainment, diluted its famous mark and successfully persuaded a federal court on Feb. 9, 1996 to enjoin the use of “candyland.com.”(Docket No. C96-130 (W.D Wash.).

In another dispute, (Avon Products Inc. v. David K. Les et al. Case No. 96 Civ. 1213 (SDNY Feb. 20, 1996), Avon Products Inc. gained control over “avon.com” after bring an action under the FTDA and successfully persuading Internic to terminate the defendant's use of “avon.com.”

7.2 Internic's Use of Interpleading

At this writing NSI is adopting an interpleader strategy for the first time in Clue Computing Inc. v. NSI. Banks have used interpleaders for years with great success. When a bank learns of a dispute over assets in its accounts, the bank does not take sides, mediate the dispute, or try to get indemnification for legal costs. Rather, the bank simply files an interpleader with the appropriate court, and puts the money in escrow until the court or the disputants settle the dispute. Only after the dispute has been officially resolved does the bank release the contested assets. As a result, banks avoid entanglements in litigation where it has no interest or role.

In Clue, Hasbro Corporation, producer of a board game named “Clue” complained to Internic that Clue Computing, an Internet services provider, infringed on its federally trademark “Clue” by operating at “clue.com”. Pursuant to its DND Policy, NSI sent a 30-day letter to Clue Computing in February 1996 stating that Clue's domain name “clue.com” would be soon deactivated pending resolution of the dispute. Shortly before the scheduled deactivation day, Clue filed suit against NSI in Colorado state court and won an injunction preventing the deactivation.

NSI's next move was to file a separate lawsuit in Colorado federal court, an interpleader complaint naming Clue and Hasbro. NSI's complaint attempts to take a dispute between Clue
and NSI and transform it into a dispute between Clue and Hasbro. (It also appears NSI wishes to avoid allowing any judge to consider whether NSI should be ordered to scrap the DND.)

In response, Clue moved for dismissal of NSI's interpleader action so that the state court action may go forward. As of this writing, the outcome of the federal motion has not been determined.

If NSI successfully uses the interpleader, future domain name disputants would learn that it doesn't pay to include NSI in their lawsuit since the courts would not award damages against NSI. In turn, Internic could scrap its indemnification policy and then domain name owners would not be unfairly subject to being required to post potentially enormous bonds for Internic's legal expenses based on mere claims by challengers.

### 7.3 Transferability of Domain Name Ownership

One benefit domain names provide to consumers is their trade name or mark value: a domain name may help to identify the source of a good or service provided by a Web site. Transferring domain names would thus potentially mislead consumers as to the source of the goods or services transacted on the Web. However, as discussed at length in section 5.1.1 in the context of trademarks, restrictions against transferability may not do any better than natural market forces in averting consumer confusion caused by the licensing or selling of domain names.

In any case, there are additional benefits from domain name transferability. Being able to buy, sell, license, or assign domain names would be economically advantageous for the same reasons why being able to buy, sell, or rent real property is advantageous. The World Wide Web is like an attractive business district. Allowing a domain name owner to sell his attractive electronic address to another who can cultivate and develop that site better enables the best use of the domain name. Such a sale benefits consumers and owners alike: consumers benefit by having a more cultivated and better developed Web site; the new owner (buyer) benefits from the enhanced profits generated by his improved development of the site; and the former owner (seller) benefits by having an opportunity to negotiate for part of the surplus profits as part of the sales price.
Presently, Internic policy does not allow for the direct transfer of domain names from one owner to another. If A desires a domain name presently “owned” by B, what usually occurs is that A would pay B to unregister B's domain name, and then A would apply for the now hopefully unused name. A second way, which applies only if B is a company and not a person, is for A to purchase B, including all of B's assets. Then B still owns its domain name, but A through its control of B effectively controls the use of that name.

There are many inefficiencies in these indirect transfers. During the first way of transfer a third party C might wreck the transaction by registering the name with Internic ahead of A after B has released it. There are also transactions costs associated with both ways of transfer. For instance, while A may value the name more than B, it may not value B itself sufficiently to purchase B in order to get at B's domain name.

I believe that this lack of a direct transfer mechanism for domain names will eventually be corrected due evolutionary pressures. This will probably happen after the rules defining the boundaries of domain name ownership are established and clarified. The institution of transferability will be a major step towards promoting the legal status of domain names closer to real property.

8. Summary

In this note, I have described the present litigation and controversy surrounding domain name registration and ownership. As described, I believe this litigation is driven largely by inefficiencies in Internic's DND Policy for handling domain name disputes and by shortcomings in the practice of relying on traditional trademark law for determining and protecting domain name ownership. Consistent with the evolutionary model of Rubin and Priest, the rules governing domain name ownership are slowly changing as a consequence of the present litigation.

A related issue concerns whether domain name ownership protection ultimately will disengage from trademark law or if trademark law will evolve along with and be changed by the growth of the Internet and the growing role of the Internet and of electronic addresses in commerce.
Regardless of the outcome of this issue, I expect that domain name owners ultimately will enjoy rights not unlike real property rights. In this sense, the real world will spread into the Internet and World Wide Web.

ENDNOTES

1 An extended version of this article is forthcoming in the Southern California Interdisciplinary Law Journal (1997), University of Southern California Law School.

2 JD candidate, Stanford Law School and PhD student, Stanford Graduate School of Business. The author, who holds a PhD in Physics (1992) from UCLA, is grateful to the John M. Olin Summer Fellowship in Law and Economics and the Brown and Bain Fellowship in Law and High Technology for financial support.

3 This picture may be a bit too simplistic for reasons I won't go into here. Cooter and Kornhauser (1980) studied a Markov process model of common law evolution and found non-unique time-varying equilibria. Their result suggests that the dynamical consequences of Rubin's suggestion may be more complex than simple steady-state economic efficiency.

4 I will assume that the evolutionary mechanism of Rubin and Priest holds even if legislatures and other institutional rule-making bodies help the courts to make rules.

5 As described in section 3.1, this Policy is modified effective September 9, 1996.

6 In the DND Policy (Revision 01), "trademark registration" means any "foreign or United States federal trademark or service mark registration . . . ."

7 Whereas Revision 01 honours any federal trademark certificate, under Revision 02 if the federal certificate is American it is acceptable only if registered on the Principal Register. Supplemental Register certificates are not acceptable.


9 In a presentation at Stanford Law School in April, 1996, an attorney from the Venture Law Group, a Silicon Valley law firm, reports that a subsidiary of AT&T anonymously paid a client $100,000 to give up a domain name.
10 In this stylised story I am glossing over transaction costs, which may obstruct favourable transactions from occurring. Regulations which restrict the absolute nature of basic ownership rights may be imposed to relieve transactions obstructions and improve social welfare. *Id.* at 34-35.

11 An extreme example of this is the British colony of Hong Kong, which is reverting back to mainland China in 1997. This example is interesting in that while it illustrates that even long term (99 year) leases do not entirely circumvent the perverse incentive problem, the perverse incentives problem can be overcome if tenants can be insured of a sufficiently large income stream during their leases to justify whatever investment they make.

12 Locke's view is that one owns one's body and, by extension, the fruits of his body's labour. Hence, first useful possession establishes a property right. Richard Epstein. 1979. "Possession as the Root of Title." 13 *Ga. L. Rev.* 1221.

13 The normative law and economics view may be summarised as follows. Property rights exists as a bundle of strands of distinct rights. Particular strands—tailored to the situation—are granted to encourage social-welfare-maximising use and investment. In determining whether a particular strand should be granted, its benefits should be balanced against the costs of its enforcement.

14 Note that while the idea itself is not depleted by having numerous consumers, the original author's opportunity to profit from his idea (e.g. to sell his novel) is depleted if a pirate distributes copies of the idea before the author can sell it. Note also that domain names ARE indivisible in that only one party can claim each address. In this sense, domain names fall on the real property side of the divide.

15 The transfer of intellectual property is facilitated by a procedure known as "licensing."

16 The utility of notice is underscored by the legal popularity of title registration requirements and the adverse possession doctrine, under which owners can be divested of property for failing to protest against dispossession in a timely manner.

17 This was the first time NSI's DND policy has been enjoined by a court. Domain name owners have sought such injunctions five other times, but the injunction motion was always settled out of court before a decision.

18 This motion and other documents relating to this case, including the original Complaint and other moving papers, are available at "http://www.patents.com/clue/clue.sht".
References:


