Are Ideas Within the Traditional Definition of Property: A Jurisprudential Analysis

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#### INTRODUCTION

Ideas in the form of technical know-how, information, inventions, and unique product designs are products of mental activity that often have substantial value. Such products of the mind, generally called intellectual property, are significantly different from realty or tangible objects. Products of the mind can be simultaneously possessed and used by multiple parties, and different parties may even use the same product of the mind differently. In contrast, the mythical Blackacre cannot be simultaneously used as an airport and as a cornfield. Furthermore, a tangible object such as a wooden chair is not capable of being used both as a seat and as fuel for a fireplace.

In addition, it is often difficult to determine the precise parameters of ideas and to control their use. Products of the mind inevitably rely upon pre-existing knowledge and ideas for their development and creation. The value and utility of a product of the mind may be further enhanced by the personal knowledge of an individual learning of an idea or innovation for the first time. It is obvious that great difficulties can arise in attempting to separate a specific idea from both pre-existing information and the specific knowledge which an individual hearing the idea possesses in her own mind. Moreover, it is difficult to prevent a person from thinking about an idea or innovation she has learned about. Once we learn something it becomes part of our knowledge base, and it cannot be erased from our brain the way that data can be erased from a computer's memory. In contrast, it is relatively easy to prevent a person from using realty or tangible objects that are owned by another person.

These differences between ideas and realty or tangible objects raise the question of whether ideas fit within the traditional concepts that comprise property law. To answer this question, this article will first attempt to provide a generic definition of property. The underlying policy reasons for the protection of intellectual property, including ideas, will be identified. In light of this definition and the underlying policies, the protection of ideas under state common law, trade secret law, and patent law will be examined. The article will conclude that common law idea protection, trade secret law, and patent law are all property based regimes predicated on the recognition of property rights in ideas.

### I. A GENERIC DEFINITION OF PROPERTY

Any ordered system of society must confront the issue of who owns and who can exert control over various tangible and intangible things that exist in society. To minimize violent interaction among people, an organized system must exist to determine who can use land, chattels, and other "things." Property law provides a structural framework and a set of rules that specify and control the legal relationships between persons and things.[2]

It must be made clear that property law does not create things. Things exist even in the absence of all law.[3] Property law merely defines the relationships between such existing things and members of society.[4] When it is stated that X owns property, this assertion means that the law has created and granted to X certain rights with regard to an existing thing. Absent such legal rights, X may still have or possess the thing in question, but it cannot be said that X has property.

Inherent in fully comprehending the definition of property is the necessity of defining the things that are the subject of property rights. This task is easily accomplished when dealing with realty or tangible personalty.[5] Realty is tangible, unique, and easily identifiable. Personalty may or may not be unique, but it is both tangible and identifiable. Intangibles present more difficult questions. For example, are ideas, methods of doing things, mathematical formulas, rights and obligations contained in a contract, or academic tenure things that can be the subject of property rights?[6]

A simple but often quoted definition of property states that property is anything to which a label stating the following can be attached:

To the world:

Keep off X unless you have my permission, which I may grant or withhold.

Signed: Private citizen.

# Endorsed: The state.[7]

This definition focuses on the right to exclude others from something you own. Alternatively, many commentators define property as a bundle of three rights that inure to the owner of a thing. First, the owner has the right to possession of the thing. Second, the owner has the right to use of the thing. Finally, the owner has the right to alienate or otherwise dispose of the thing.[8]

These two definitions are analogous. The right to possess and use something is simply another way of stating that you have a right to exclude others from using that thing, since arguably you do not possess something if your right of use is the same as everyone else's right of use. Finally, the right to dispose of something is also implied in the right to exclude others from using the thing because granting others the right to possess or use it is really a method of disposing of that thing.[9]

Both of the above definitions of property, as stated, are only workable in a vacuum. The functioning of an ordered society requires the surrender of some property rights both to society and to other property owners.[10] In theory, a property owner should have the right to use the thing she has property rights in with unlimited interference from the state. However, if X owns Blackacre and Y owns Whiteacre, a conflict may arise from unlimited property rights being vested in both X and Y. X may decide to operate a low-level radioactive waste disposal site on Blackacre. Y may decide to operate a high-priced health spa and resort on Whiteacre. Such a situation is problematic because the two uses proposed by X and Y are incompatible. The proximity of Whiteacre to a radioactive waste disposal site will make it difficult or impossible for Y to operate her spa and resort since it may be impossible to attract customers. Likewise, the operation of the radioactive waste disposal site may not be acceptable if toxic substances threaten the lives of persons on neighboring Whiteacre. Consequently, either X must surrender a portion of her property rights to X to resolve the conflict between their competing uses of Blackacre and Whiteacre. This surrender of property rights has been subsumed into the common law of private nuisance.[11] The rights of X and Y to use Blackacre and Whiteacre, respectively, must be balanced against each other's interests and the interests of society as a whole.[12] If the use proposed by X or by Y is unreasonable in light of these interests, the use will either be limited, prohibited, or it will be allowed to continue upon payment of monetary damages.[13]

Owners of property rights must also surrender a portion of their property rights to the government when necessary to preserve the health and safety of the general populace. The public at large has an interest in maintaining its own health and safety. Fulfillment of this public interest falls upon the government as the representative of the public at large. If the government fails to fulfill this obligation, public confidence in government erodes, and ultimately, the reign of the governmental system ends. Therefore, X may not be permitted to use Blackacre for a radioactive waste disposal site if Blackacre is located near a densely populated urban center whose inhabitants' health could be adversely affected by the proximity of the disposal site.

Other public policy considerations also exist that justify surrender of a portion of an owner's property rights to the government. Such policy considerations are often the basis for environmental, zoning, historical preservation, or land use restriction statutes or ordinances. For example, protection of endangered animal species for the good of society is the policy consideration limiting the exercise of certain property rights in mineral exploration or logging. Similarly, protection of unique natural land formations in order to prevent erosion may be the policy consideration for prohibiting the construction of dwellings in certain coastal areas. The orderly administration of law enforcement may justify governmental invasion of an owner's property rights via issuance of a search warrant. Finally, rent control ordinances that limit the rental income earned from conveying real property pursuant to a leasehold have been premised on the public goal of protecting low-income tenants from the undue hardship of excessive and unreasonable rent increases.[14]

Owners may also face interference with their rights to dispose of property. An owner of a firearm cannot freely dispose of it by sale or gift in every state. In many states, the method of transfer and the potential transferees are limited by statute. A condominium declaration or a covenant running with the land may limit the ability of an owner of realty to decide to whom she can sell her realty. Often, a condominium association or a homeowner's association has a right of first refusal over a proposed sale. Federal bankruptcy law allows an owner to sell her property, but she cannot dispose of it by gift.[15] In contrast, certain types of personalty can be disposed of by gift but not by sale.[16] Finally, some types of personalty, such as prescription drugs in the hands of the person it was prescribed for, or a license to practice medicine, are not transferable to anyone by the owner.

Property can therefore be viewed as a bundle of legal rights that are subject to being shared, at least partially, with both other private property owners and with the government in some instances. A difficult question is how restricted or limited can the bundle of rights be before property rights cease to exist? Many restrictions on the rights of an owner can be justified on the basis of societal concerns for such things as health and safety. Nevertheless, some restrictions may be so limiting that property rights cease to exist. [17] For example, a California statute limits the use of excised body tissue and mandates its disposal by certain methods.[18] Based on this statute, the California Supreme Court concluded that cells removed from a person during an operation were not property, since the effect of the statute was to greatly restrict the permissible use of the cells and to require their eventual destruction.[19]

The above discussion demonstrates that a workable definition of property can be expressed only in the form of a bi-polar continuum. If a person has the unrestricted right to possess, use, and dispose of a thing, then that thing is the subject of property rights vested in that person. This represents one end of the continuum. At the other end of the continuum are things which are subject to limitations that deny anyone the right to possess, use, or dispose of the thing. Such things are not the subject of property rights vested in an individual. These two ends of the continuum are theoretical. Few, if any, things fit at either end. The majority of things falls between these two poles of the continuum. The difficult question that arises is whether something should be treated as subject to property rights or not since things must be placed at one end of the continuum or the other.

One approach is to objectively evaluate the amount of control an owner has over something to determine if it should be considered property.[20] This approach, however, is inadequate to explain the treatment of various property interests. As already discussed, a body part removed during an operation is not considered property in California because use and disposal of the removed tissue are greatly restricted. Nevertheless, future property interests such as a reversionary interest, a possibility of reverter, a power of termination, a contingent remainder, and an executory interest are all considered real property interests.[21] This classification is hard to justify under an objective control test. A reversionary interest retained by a lessor upon conveyance of a nine hundred and ninety-nine year lease is an extremely remote interest. Additionally, other future interests are still valid even if it is highly unlikely they will ever become possessory interests. In fact, the common law Rule Against Perpetuities specifically upholds the validity of certain contingent property interests if any possibility, no matter how remote, exists that the property interest can become possessory within the perpetuities period.[22] Such future interests grant no rights of possession or use of the property before the end of the prior possessory estate.[23] In addition, many of these contingent interests were inalienable at common law.[24] Under an objective control test, many of these contingent future interests would not be property. Nevertheless, it is clear that such interests have been consistently viewed by the law as property.[25]

In the context of Fifth Amendment "takings," the government must compensate private property owners when their property is taken for public use.[26] Traditionally, governmental interference with private property interests is a taking only when there has been either a physical invasion of the property or when the entire economic value in the property has been eliminated by the governmental action.[27] If after governmental action the private property owner retains possession of the property and is capable of making some use of the property, no taking has occurred.[28] Despite significant limitations on the use of the property, ownership continues. This

result reinforces the conclusion that the bundle of property rights can be significantly interfered with or limited without the destruction of property rights. A contrary conclusion would require governmental compensation whenever the rights of a property owner are significantly limited or interfered with, since compensation is required when the governmental action amounts to a taking.

The determination of when something is property can be understood only by evaluating the general underlying policy considerations of the law in a specific factual setting. If these considerations are furthered by treating something as property, then that is the conclusion the court will reach. If these considerations are not furthered, then the thing at issue will not be viewed as property. A decision that something is or is not property is therefore a legal conclusion, or the ending point rather than the beginning of the analysis.

## II. THE UNDERLYING POLICIES OF INTELLECTUAL PROPERTY LAW

## A. Securing for the Public the Benefits of Products of the Mind

One of the most fundamental purposes of intellectual property law is to enable the public to benefit from the innovative mental creations that spring from the minds of people.[29] For example, a new drug or medical discovery can alleviate suffering and prolong life. A faster computer microprocessor may increase the usefulness of computers and reduce their cost. Development of alternative fuels may reduce environmental degradation resulting from the current reliance on fossil fuels. The creation of works of fine art may enrich our culture. Improved marketing and advertising techniques may improve product differentiation and enable consumers to more easily make purchasing decisions.

The law seeks to accomplish this goal by providing rewards for making intellectual contributions to society. Such rewards are necessary incentives to encourage the pursuit of intellectual activities.[<u>30</u>] Inability to profit from creative endeavors would tend to be a disincentive to invest time or capital in research and development activities. For example, a company typically can spend tens of millions of dollars developing a computer microprocessor. Such microprocessors can then be reverse engineered for a fraction of the development costs. Absent legal protection, the reverse engineer could then underprice the developer because she would not have substantial development costs to recoup. Consequently, a company would have no incentive to make the investment in research and development; thus, society would lose the benefit of such activities.

### B. The Regulation and Management of Competition

Intellectual property law is also designed to promote commercial fairness by regulating and, in some cases, managing competition. [31] A business should not be allowed a "free ride" on the back of a competitor who has invested substantial time, effort, and capital developing a product or a marketplace reputation. At the same time, the law strives to promote competition as an important aspect of the free enterprise system.[32] Such regulated or managed competition is a policy that is strongly embedded in our law. Both state and federal antitrust laws prohibit certain types of marketplace behavior rather than requiring unfettered free-wheeling competition.

In applying federal antitrust law, the United States Supreme Court has specifically approved conduct that restrained certain aspects of competition. In Continental T.V., Inc. v. GTE Sylvania, Inc., [33] GTE, a television manufacturer, franchised retail sellers of its products. The franchise agreements contained a location clause which allowed franchisees to sell GTE televisions only from the franchise location. [34] These location clauses were alleged to be unfair restraints of trade in violation of federal antitrust law[35] because they limited intrabrand competition among GTE franchisees.[36] The court noted that vertical restraints, such as these location clauses, limited intrabrand competition. Nevertheless, the court found the anticompetitive practice to be allowable because it increased interbrand competition.[37]

Another recent Supreme Court decision, Aspen Skiing Co. v. Aspen Highlands Skiing Corp.,[<u>38</u>] involved competing ski areas located in Aspen, Colorado. Aspen Skiing Company operated three areas, and a competitor, Aspen Highlands, operated a single ski area. The competitors cooperated in the issuance of a joint ski lift ticket which entitled the user to ski at any of the four Aspen ski areas. The practice of offering the joint ticket was challenged by the Colorado Attorney General as providing a forum for price fixing and as an attempt to monopolize downhill skiing services in Aspen. The case was settled by consent decree.[<u>39</u>]

Subsequently, Aspen Skiing Company ceased offering the joint ticket in favor of a ticket limited to the three ski areas it owned. Aspen Highlands filed suit, alleging that Aspen Skiing Company's refusal to cooperate in issuing the all-Aspen ticket was an attempt to monopolize the ski market in Aspen, in violation of federal antitrust law. The Supreme Court affirmed an award of seven and onehalf million dollars against Aspen Skiing Company. Additionally, the district court entered an injunction requiring the competitors to cooperate in offering a four area ticket for a limited period of time.[40] This result evidences an intent to manage competition because it literally punishes Aspen Skiing Company for refusing to cooperate with Aspen Highlands in offering their services. If the purpose of the law was to promote true competition, Aspen's conduct would have been permitted.

In a famous antitrust decision,[<u>41</u>] Judge Learned Hand reinforced the idea that antitrust law is designed to regulate competition rather than to prohibit the existence of monopolies in the market. Judge Hand stated that

According to Judge Hand, it is the conduct engaged in by the competitor to acquire the monopoly that is the subject of review.

### **III. ARE IDEAS WITHIN THE DEFINITION OF PROPERTY?**

An examination of intellectual property provides a good example of the application of an existing body of law to new things that have arisen from both societal changes and technological advances. Although the fundamental concepts of property pre-date the invention of computers and the sophisticated technical know-how of today, protecting these additions to society within the existing framework of property law promotes predictability and uniformity in the law. In fact, the law of property is easily adaptable if the basic presumptions and definitions of property law are applied to ideas. Nevertheless, property law protection should extend to such things only if the underlying policies of intellectual property law are furthered.

Answering the question of whether ideas are within the generic definition of property previously developed requires application of the bundle of rights theory. Each of the different methods of protecting ideas must be individually examined. The dominion and control an owner can exert over the idea, the right to use the idea, and the right to alienate the idea must be evaluated. Additionally, the determination of whether ideas are property must be made in reference to furthering the underlying policies of intellectual property law. The protection of ideas via common law idea protection, trade secret law, and patent law are examined separately below.

### A. Common Law Protection of Ideas

Ideas are extremely valuable things since they are the initial building blocks of many creative innovations.[43] Nevertheless, an analysis of whether they are property initially requires an application of the bundle of rights definition of property. The ability to possess an idea by exerting dominion and control over it is a fact dependent question. Due to the nature of an idea, it cannot be possessed if it is known by others.

For example, if X conceives of an idea, which unknown to her is generally known by scientists, can she possess the idea? X may be able to personally use the idea and even sell it to others who are not aware of it. She may even be able to exert dominion and control over her personal knowledge of the idea by keeping it secret and by disclosing it to others only pursuant to a contract requiring that the idea be kept secret. However, she is powerless to prevent the scientists who are aware of the idea from using it. In fact, those scientists are free to disclose the idea to everyone without X having any ability to prevent such actions. Such an analysis seems to establish that X has the right to use the idea. However, her right to possess and alienate it will depend on the degree to which it is known by others. This analysis explains the development of the often judicially stated requirement that ideas must be "novel" before they are considered property.[44] This requirement can really be viewed as a shorthand statement of whether the particular idea at issue is subject to being possessed by someone in accordance with the bundle of rights definition of property. [45] Hence, an idea that is not novel is in the public domain and can be used freely by anyone.[46] Such an idea is not property, and it is therefore not possible to steal it.[47]

This novelty requirement was one of the issues in an action against investigative reporter Geraldo Rivera and a major television network for misappropriation of an idea.[48] Plaintiff alleged that he related to the reporter the story that Elvis Presley died from an interaction of prescription drugs.[49] Subsequently, Mr. Rivera produced an hour-long special on the death of Elvis Presley that was broadcast on network television. The show concluded that Presley's death was due to an interaction of prescription drugs rather than cardiac arrhythmia as officially listed.[50] The court rejected plaintiff's misappropriation action because prior to plaintiff's alleged disclosure of the drug interaction theory to Mr. Rivera, several newspaper articles had speculated about this theory. Therefore, it was not novel.[51]

The court's determination that novelty was lacking was actually a determination that the idea allegedly provided by plaintiff was not property. Referring to the bundle of rights theory of property, it is obvious that an idea that is disseminated via newspaper articles cannot be subject to the dominion and control of anyone. Plaintiff would be unable to assert any control over the idea or exclude anyone from using it. Furthermore, allowing plaintiff to have property rights in this idea would amount to removal of the idea from the public domain. This result is contrary to one of the underlying purposes of intellectual property law, which is to secure the benefits of products of the mind for the public. Therefore, the idea is incapable of being property.

In a more recent decision, a novelty determination was undertaken with regard to alleged misappropriation of an idea for an investment strategy that minimized losses.[52] Plaintiff confidentially disclosed his idea to a brokerage house which rejected the idea, but which subsequently began using an analogous investment strategy. However, the plaintiff was unsuccessful in pursuing his misappropriation action against the brokerage house because the idea was previously known. The court concluded the idea was not novel, and plaintiff therefore did not have a property interest in it.[53]

In the area of advertising, some slogans have been treated as property while others have been deemed unprotectible under a property theory. The slogan "The Beer of the Century" for use in advertising the sale of beer was deemed property,[54] but the slogan "We can't help bragging about Dad's. After all it's our pop" for use in advertising Dad's root beer was held not to be property. [55] Likewise, the slogan "Mr. Wiggle" used for the sale of jello was determined not to be property.[56] These results are consistent when viewed from the perspective of the right to possess the slogans and to exclude others from using them. The beer slogan was original, and the creator disclosed it only on a limited basis to a potential buyer subject to a restriction that the slogan could not be adopted or used by others. The creator maintained control over the slogan and avoided disclosure of it to the general public. Therefore, the slogan was novel and entitled to property status.

In contrast, the root beer slogan was denied status as property because it had been freely disseminated to the public. The jello slogan was also denied property status because it had been previously and independently created and used in advertising by another party. Both of these slogans were therefore not novel because they were not subject to the control of the party asserting property rights in them.

Valuable ideas are often denied status as property despite the existence of novelty.[57] Prior to the late 1960s, the school supplies industry was characterized by product lines that were drab and unattractive.[58] In response, the design firm of Richter & Mracky came up with the new idea of placing fabric and designs on notebook covers and binders that matched clothing being advertised in young women's fashion magazines. They disclosed the idea to a school supply company and prepared sample designs, but the school supply company rejected the designs. The company subsequently developed its own designs which it used in accordance with Richter & Mracky's idea. The concept was a great success that generated millions of dollars in additional sales revenue. [59] Nevertheless, the court refused to allow Richter & Mracky to assert any property rights in its idea. On its face this result seems highly inequitable since the idea was not previously used in the industry, and there was no evidence that it was known by others. Furthermore, its use generated millions of dollars in sales revenue.

In another decision, a railroad employee came up with the idea of selling advertising space in the employer's railroad cars and railroad stations. The employee disclosed the idea to the employer who adopted it and reaped substantial profits.[60] The employer refused to compensate the employee, and the court found that the employee had no property interest in the idea. The court took judicial notice of the fact that selling advertising space was well known and therefore found that applying the employee's idea to the railroad was obvious and without any value.[61] This conclusion seems hard to justify. If the employee's idea was obvious, why had

this type of advertising not been done by the railroad prior to the employee's suggestion? Furthermore, how could the idea be without value in light of the substantial profits the idea generated upon implementation?

The above two cases suggest that the court is actually looking beyond the question of whether the novel idea at issue was property. One explanation of these and similar cases is that a continuum exists with regard to the granting of property rights in novel ideas. [62] At the first end of the continuum are mere mental conceptions of ideas without any method of implementing or carrying out the idea. For example, I might conclude that an inexpensive method of desalinating ocean water would assure an adequate supply of freshwater in areas near the ocean that lack adequate supplies. However, this idea is a mere abstract mental conception if I lack the actual knowledge necessary to inexpensively desalinate water.

At the opposite end of the continuum are ideas that are reduced to a tangible working form. An example would be a working desalinization plant that operates for one-hundredth of the cost of existing desalinization plants. Both the mere abstract mental conception and the tangible working plant may be previously unknown to anyone in the world, therefore rendering them both novel and subject to being possessed, used, and sold by the creator. Thus, they would seem to be property under the bundle of rights definition. But does protecting such novel products of the mind facilitate the public's acquisition of these products? Granting a property right in the abstract idea of developing an inexpensive desalinization plant does not provide any benefit to the public. However, once the plant is developed and a working facility exists, the public does benefit. Therefore, an idea at the first end of the continuum should not be granted status as property since protection of such an idea does not further the underlying purpose of intellectual property law by providing a benefit to the public. [63] In contrast, an idea at the opposite end of the continuum should be property law.

Additionally, denying property status to abstract conceptions at the first end of the continuum actually promotes the goals of intellectual property law. If property status is denied at the abstract idea stage but granted when the idea is reduced to a tangible workable form, innovators will be encouraged to reduce abstract ideas to tangible forms.[64] If the idea is potentially valuable, inventors and innovators may be spurred to reduce it to a tangible form as rapidly as possible because in the interim someone else may develop the same idea. Withholding property status until an abstract idea is reduced to a tangible form rewards the first party to reduce the idea to a tangible form, since the first party to have possession of property is the owner.[65]

Therefore, property status should be granted only to ideas which are far enough along on the above described continuum such that a public benefit flows from granting property status to the idea. This policy judgment is represented by the "concrete" requirement often espoused by courts in idea protection cases.[<u>66</u>] When an idea is sufficiently developed to benefit the public, a court will conclude the idea is concrete, and as a result, it is deemed property if the idea is also novel.[<u>67</u>] An idea inadequately developed to benefit the public will be deemed not to be concrete and therefore not be property.[<u>68</u>]

Once an idea is deemed novel and concrete and therefore property, that status is easily altered. The bundle of rights definition of property defines property as a thing that can be possessed, used, and alienated. Therefore, once the idea is disseminated to the public, property status ends because such dissemination injects the idea into the public domain.[69] As a consequence, anyone is free to use the idea. The creator of the idea retains the right to use her idea, but this use right is identical to the use rights of the rest of the public. Additionally, the creator has lost the right to alienate the idea. The creator cannot transfer the idea to anyone else since it is already accessible to everyone by virtue of its public domain status.

Maintaining the property status of an idea requires controlling access to it. This can be accomplished by not revealing the idea to anyone or by disclosing the idea pursuant to a contract which obligates the recipient of the idea to maintain confidentiality. This need for control over access has led to the development of trade secret law, which defines the requisite secrecy and access requirements necessary to maintain a property interest in certain ideas.

#### **B. Trade Secret Law**

Trade secrets are actually a species of ideas. The generally accepted common law definition of a trade secret is explained in the following statement:

"A trade secret may consist of any formula, pattern, device or compilation of information which is used in one's business, and which gives him an opportunity to obtain an advantage over competitors who do not know or use it. It may be a formula for a chemical compound, a process of manufacturing, treating or preserving materials, a pattern for a machine or other device, or a list of customers. It differs from other secret information in a business . . . in that it is not simply information as to single or ephemeral events in the conduct of the business, as, for example, the amount or other terms of a secret bid for a contract or the salary of certain employees, or the security investments made or contemplated, or the date fixed for the announcement of a new policy or for bringing out a new model or the like. A trade secret is a process or device for continuous use in the operation of the business. Generally it relates to the production of goods, as, for example, a machine or formula for the production of an article. It may, however, relate to the sale of goods or to other operations in the business, such as a code for determining discounts, rebates or other concessions in a price list or catalogue, or a list of specialized customers, or a method of bookkeeping or other office management . . .

The subject matter of a trade secret must be secret. Matters of public knowledge or of general knowledge in an industry cannot be appropriated by one as his secret."[70]

In addition, the Uniform Trade Secrets Act[<u>71</u>] has been recently adopted in a significant number of states.[<u>72</u>] It provides the following definition of a trade secret:

"'Trade secret' means information, including a formula, pattern, compilation, program, device, method, technique, or process, that: (i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy."[73]

The Restatement and the Uniform Trade Secrets Act definitions are very similar. They both require a trade secret to be information that: (1) is not generally known; (2) is kept secret; and (3) has economic value.[74] However, the two definitions also include some

fundamental differences. The Restatement definition requires that a trade secret must actually be used in the trade secret owner's business. Moreover, it rejects isolated and ephemeral data from the definition of a trade secret.[75] In contrast, the Uniform Act only requires that a trade secret have actual or potential economic value. Therefore, actual use of a trade secret is not mandated by the Act's definition.[76] Finally, isolated or ephemeral data can properly be the subject matter of a trade secret under the Act.

As already discussed, an idea can be a "thing" subject to property rights; therefore, "know-how" that fits under the definition of a trade secret is also capable of being property. Consequently, an analysis of trade secrets should focus on the generic definition of property previously developed. This examination necessitates a determination of whether trade secrets are things which can be possessed, used, and alienated.

The possessor of a trade secret has the right to exclude others from using her trade secret. Stealing the trade secret from its owner, using or disclosing the trade secret in violation of a confidential contractual agreement, or engaging in improper means of obtaining the trade secret are prohibited by trade secret law. In addition, a trade secret owner can freely alienate the trade secret. Finally, ownership of a trade secret gives the owner the right to use the trade secret for her commercial advantage. Based on these considerations, trade secrets appear to fit within the bundle of rights definition of property. However, this thesis must be tested by analyzing the particular legal rules that have developed for trade secrets.

The requirement that a trade secret must not be generally known is merely another way of determining whether the trade secret owner has possession of the know-how comprising the trade secret. If the know-how is widely known, it is not possessed by its owner since she would not be able to exert control over know- how in the public domain. It is axiomatic that the owner must take reasonable steps to maintain the secrecy of her trade secret before property rights attach to it. Property rights in something normally do not depend on maintaining secrecy; however, the definition of property requires that the owner has the right of dominion and control over the thing and thereby the right to exclude others from using it. If the trade secret owner fails to maintain secrecy, the trade secret will become public information, and it will be impossible for the owner to exert any dominion and control over it. Hence, the secrecy requirement makes sense because the existence of the property interest depends on secrecy.

This secrecy requirement is analogous to actions that must be taken to preserve the existence of tangible property interests. For example, certain preventative steps must be taken to preserve an oceanfront house located on land subject to severe storm erosion. The owner must take steps to minimize or prevent erosion, or ocean storms will eventually erode the land and cause the house to fall into the ocean. Likewise, computer data stored on tapes or disks must be maintained in an environment free of magnetic fields to prevent destruction of the stored data. In a similar fashion, the failure of the owner of know-how to protect its secrecy allows others free access to it. This access results in it being injected into the public domain such that the owner will be unable to exert control over it.

Despite its importance, a trade secret owner only has to undertake reasonable efforts to maintain secrecy; absolute secrecy is not a prerequisite for trade secret protection.[77] This reasonable effort requirement is necessary to maintain competition, since requiring absolute secrecy in many cases would be economically prohibitive. Consequently, absolute secrecy could reduce any competitive advantage derived from the development and implementation of the trade secret. Nevertheless, some efforts must be undertaken to prevent public knowledge of the trade secret.[78] In the absence of any degree of secrecy, the secret is injected into the public domain and thereby terminates any ability of the trade secret owner to control its use. As a consequence, the property status of the trade secret would end due to this lack of control. Requiring only reasonable secrecy efforts strikes a balance between protecting a trade secret owner's competitive advantage and maintaining competition. This compromise is consistent with regulating competition, which is an underlying policy of intellectual property law.

These requirements that a trade secret must not be generally known and must be a secret are therefore analogous to the novelty requirement used in idea protection cases. Such requirements make sense both with regard to idea protection and protection of trade secrets in view of the fact that their purpose is ultimately to determine if someone has possession of the idea or trade secret. [79]

Nevertheless, some courts disagree over whether know-how must be novel, in addition to the other requirements, for it to be a trade secret.[80] This disagreement stems from confusion over what is meant by novel. A novelty requirement makes sense if it is used as a word of art to simply refer to whether the know-how is possessed by someone as opposed to being in the public domain. This usage of the term is one generally found in idea protection cases. An analogous use with regard to trade secrets is both consistent and logical.

However, novel is sometimes used to mean that know-how must be more than an obvious innovation. It must be sufficiently innovative such that a skilled mechanic would view it as an nnovative advance rather than a mere obvious change. In this sense, novel is used to separate know-how into two categories. First, know-how which anyone skilled in the technology at issue would be capable of using or developing is not novel even if it is new and original. For example, the substitution of a newly developed material for a commonly used material would be an obvious advance for a skilled mechanic. Therefore, the substitution of plastic for certain metal body parts would be an obvious advance that any skilled automotive designer could make upon the initial development of structural plastic.

The second category of know-how refers to a new development or discovery which is beyond the ability and skill of the typical person skilled in the technology. Such know-how is novel because it represents a technological contribution which advances the state of the art. This use of novelty arises from analogy to patent jurisprudence. Federal patent rights are granted only to otherwise patentable innovations that fall into the second category of know-how discussed above.[81] However, this definition of novelty is inappropriate with regard to trade secret protection.[82] Such a distinction merely identifies specific types of ideas which are subject to the heightened protection granted by patent law. Ideas that fail to come within this second category may still be property, although they may not be capable of receiving the specialized treatment provided by the patent law.

Another well established rule is that a third party can freely use a trade secret if she independently invents it.[83] Additionally, she is free to use it if she lawfully obtains ownership of a product embodying the trade secret and via disassembly of the product is able to reverse engineer the trade secret.[84] Such independent discovery or reverse engineering may also cause the trade secret to cease to exist. However, the existence of a property interest in the trade secret following independent invention or reverse engineering will depend upon what the independent inventor or reverse engineer does with the trade secret once possession is obtained. If the trade

secret is publicly disclosed, any property interest in it is destroyed since secrecy is a necessary element. [86] However, if secrecy is maintained, the original trade secret owner's property interest should continue to exist since she can still exert dominion and control over the trade secret, can still alienate it, and can still use it.

The independent inventor or reverse engineer can likewise claim a property interest in the trade secret.86 This analysis would seem to suggest the anomalous result that two persons could independently own property interests in the same thing. This result would not be possible with tangible property, since the independent owners' rights to exert dominion and control over the property, use the property, and freely alienate the property would interfere with each other. In contrast, this problem is not necessarily present when an intangible thing such as a trade secret is involved. Two persons can independently use and possess a trade secret, can independently exert dominion and control over it, and can independently alienate it without interfering with one another. Additionally, more than two parties can maintain know-how as a trade secret but whether the independent owners can come within the bundle of rights definition of property. At some point, the number of persons who know the trade secret, even though they maintain it as a secret, will eliminate the ability of any of the trade secret possessors to exert dominion and control over the trade secret possessors now have is the right to use the trade secret like any other member of the public.

Although trade secrets, consistent with their property status, can be alienated, it is a truism that such transfers must be pursuant to an agreement that the transferee maintain the secrecy of the know-how.[88] Such secrecy agreements can be in the nature of express or implied agreements that are enforceable under contract law.[89] On one level, such a requirement can be viewed as a restriction or partial restraint on alienation. This is significant since one of the basic rights associated with classifying something as property is the right to freely alienate it. Nevertheless, such a restriction is really a means of maintaining the property status of the trade secret since such status is based on the trade secret not being generally known.[90] Therefore, unrestricted transfer of the trade secret would enable the transferee to inject it into the public domain, which would in turn destroy its property status. Consequently, any partial restraint on alienation would be peripheral to the main purpose of maintaining the property status by preventing public accessibility to the trade secret. This argument is buttressed by the fact that the number of transferees of an interest in the trade secret does not determine its trade secret status; rather, it is the type of transfer that is significant. For example, a single unrestricted disclosure of confidential know-how can inject the know-how into the public domain.[91] In contrast, granting over a thousand licenses to use confidential know-how may not inject the know-how into the public domain if every license is conditioned on an obligation that the licensee must maintain confidentiality.[92]

In light of the above discussion, the various legal rules that have developed with regard to trade secrets are consistent with trade secrets having property status. Employing a property model allows the distinctions between the Restatement and the Uniform Act definitions of a trade secret to be examined to determine which approach is consistent with property theory. The Restatement, unlike the Uniform Act, rejects isolated and ephemeral data from the domain of trade secret law.[93] Such a distinction is misguided. The focus should be on whether the information at issue is within the generic definition of property defined on the basis of whether the owner of the information can possess, use, and alienate it. If isolated or ephemeral data is original and maintained in secrecy by its creator, it fits within the definition of property. This approach is the one taken by the Uniform Act.[94]

The Restatement has also been held to require that know-how can be subject to trade secret status only if it is actually used in the owner's business to gain an advantage over competitors.[95] Such a requirement is contrary to the idea that an owner of something is free to use or not use it as she sees fit. The generic definition of property previously developed includes the right to use something as contrasted with requiring actual use. This allows the owner of the thing the discretion to decide whether to exercise that right. For example, if you own a car, you have the right to use or not use it. Your property rights are not determined by your use or non-use of the car. If you allow the car to sit in your backyard and deteriorate, it does not cease to be your property because you are not using it. In fact, the law of abandonment specifically holds that non-use of property rights results in a termination of property rights due to abandonment.[97]

In contrast, the Restatement definition requires actual use of know-how for it to be treated as a trade secret. [98] Consequently, an explanation for this requirement must be sought in the underlying policy considerations of intellectual property law. One such policy is the ability of the public to secure the benefit of the innovation. Absent use of secret know-how, no public benefit is obtained from it. However, if the know-how is used by its possessor to gain a competitive advantage in the marketplace, the public has benefitted. The public may get a superior product. For example, the product may be produced less expensively. This can help increase marketplace efficiency by injecting price competition into the market, which will in turn directly benefit consumers.

Competitors will also be spurred to develop alternative innovations in an effort to maintain their existing market share. This often benefits both consumers and society due to the resultant development of other innovations that further increase market efficiency. The use requirement therefore furthers one of the underlying policies of intellectual property law by insuring that the public obtains the benefit of the trade secret. Under this analysis, the use requirement functions in the same way the concrete requirement functions with regard to the protection of ideas. Both requirements represent determinations that property status should be withheld in certain cases on the basis of public policy.

Despite the above policy considerations, some courts[99] and the Uniform Act[100] have rejected this use requirement. The Uniform Act substitutes an economic value requirement in lieu of the use requirement. Under the Act, know-how must have actual or potential economic value to be a trade secret.[101] Focusing on economic value appears on its face to be inconsistent with the definition of property. If you possess something, the existence of your property rights in the thing should not be measured by its value. Economic value should only be relevant with regard to remedies for violation of your property rights since our legal system is based primarily on a compensatory damage model. However, one of the fundamental purposes of intellectual property law is to secure for the public benefits flowing from intellectual creations. It is therefore implicit that intellectual property law is oriented to protecting products of the mind that have value, since there is little public benefit to be gained from worthless products of the mind.

It can be argued that the Restatement's use requirement is designed to advance the same underlying policy furthered by the value requirement in the Uniform Act. This argument is premised on the belief that secret know-how will be used if it has value. Therefore, failure to actually use the know-how indicates its lack of value. Although this argument is valid in many cases, it may actually discourage innovation among individual inventors and small business enterprises. First, many innovative individuals lack the ability

to convert useful inventive ideas into practical working forms that result in a product or service that benefits society.[<u>102</u>] Additionally, individual innovators and many small businesses lack adequate capital to use secret know-how.[<u>103</u>]

The value standard protects such individual inventors and small businesses and thereby encourages them to be creative and innovative. This advantage is in contrast to the use requirement which would actually penalize such parties. Additionally, the value standard recognizes the changing state of the American economy. The United States is increasingly becoming the world leader in the production of technological know-how in lieu of tangible goods; such know-how itself has become a valuable and salable commodity. Consequently, the individual who lacks the ability and the business enterprise that lacks the capital to reduce know-how to a practical form can transfer that technology to an enterprise that has the necessary expertise and capital. This transfer encourages innovation and allows the public to obtain the benefit of the innovation, thus fulfilling an underlying policy of intellectual property law. Consequently, the value requirement is superior to the use requirement because the value requirement focuses directly on whether this underlying policy is furthered.[104]

On its face, this value standard may appear to conflict with the concrete requirement. The concrete requirement bars protection of ideas until they are sufficiently developed to benefit the public. The policy underlying this prerequisite is that it will spur reduction of the idea to a useful form which in turn will benefit the public. [105] In contrast, the value standard potentially allows protection of a secret idea prior to its reduction to a useful form. Nevertheless, the purpose of the value standard, as discussed above, is consistent with the underlying purpose of the concrete requirement. The trade secret, even if it is not reduced to a working form, must still be sufficiently developed so that it can be transferred to another party who can then utilize the trade secret such that the public receives its benefit. If the secret innovation is merely an abstract idea that requires the transferee of the idea to engage in substantial experimentation to reduce the secret to a usable form, then the secret idea is not concrete and therefore should not be subject to protection under property law. The concrete requirement and the value standard are therefore consistent.

The property status of negative information depends on whether the Restatement's use requirement or the Uniform Act's value standard is applied to trade secrets. For example, knowledge that a certain procedure or line of experimentation will not succeed may be valuable in a research and development environment. Such knowledge will allow resources to be devoted to other lines of inquiry which could prove successful, thus providing an economic advantage over competitors lacking the negative information. This advantage means that the negative information has value and therefore is potentially protectible as a trade secret under the Uniform Act's value standard.[106]

In contrast, such information, despite its value, could be denied trade secret status under the Restatement since the use requirement is not satisfied because the value of the negative information is in knowing not to use it.[107] From a property perspective, the treatment of negative information under the value standard, rather than under the use requirement, is more appropriate because it recognizes the property status of the negative information. This result is consistent with the bundle of rights definition of property, provided that the information is not known by others. Nevertheless, such property status should be accorded to negative information only if the underlying policies of intellectual property law are furthered. One of the underlying purposes of intellectual property law is to allow the public to obtain the benefits of creative innovations. Rejecting property status for negative information could increase the number of competitors whose research and development activities are focused in profitable directions if the negative information was disclosed. This could facilitate securing benefits for society by maximizing the number of competitors who are avoiding unprofitable lines of experimentation.

The use of such a policy argument to deny property status for negative information is consistent with the treatment of ideas in general. As previously discussed, the concrete requirement is a policy based prerequisite to protection of an idea. However, since the value of negative information is based on not utilizing the information, it would be easy to maintain such information as a secret. The resulting competitive advantage would be a clear incentive for not freely disclosing such information. Consequently, denying property status to such information will not allow the public to secure the information since it is likely the information will be maintained in secrecy without regard to whether it is granted property status.

Additionally, denying property status to negative information removes the protection afforded to such information by trade secret law. This would encourage attempts by competitors to engage in industrial espionage and other commercially undesirable activities in an attempt to learn of the existence of any negative information. The activities used to ascertain such information, provided they are legal, would be permissible. This is in contrast to trade secret law, which prohibits commercially immoral methods of obtaining trade secrets, even if they are legal, in an effort to regulate business practices to achieve fair competition.[108] Denying negative information property status would deny the protection afforded by trade secret law and encourage legal but commercially immoral conduct to obtain it. Consequently, granting property status to negative information is consistent with the Uniform Act's value standard and the underlying policies of intellectual property law.

An alternate view of trade secrets is that they are not property. Instead, trade secret law can be viewed as a species of tort law which regulates the methods that can be used to obtain access to the trade secret. [109] Under this approach, trade secret law does not protect information or knowledge per se. Instead, it limits the methods or means that can be used to obtain secret knowledge or information. Stealing the trade secret from its owner, using or disclosing the trade secret in violation of a confidential contractual agreement, or engaging in commercially immoral means of obtaining the trade secret are prohibited by trade secret law. In contrast, obtaining the trade secret via independent development or reverse engineering is an acceptable method of obtaining a trade secret and one that is not actionable.

However, this alternate approach is misplaced because trade secrets are within the bundle of rights definition of property. The fact that reverse engineering or independent development can destroy a trade secret merely reflects the fact that trade secrets, like other things, can be destroyed or taken by third parties. For example, property rights in real estate are not denied just because the government has an absolute right to take your property through the power of eminent domain. Moreover, property rights are not denied just because private nuisance law allows an adjacent landowner to obtain a portion of your property rights without paying compensation. For example, a property owner, pursuant to nuisance law, may be granted the right to interfere with an adjacent landowner's use. This interference may deprive the adjacent landowner of certain uses of her land. Such a right is actually a servitude on the adjacent land and is a recognized property interest.[<u>110</u>] Likewise, a tenancy by the entirety ownership interest is not denied property status because the concurrent interest is destroyed by one party divorcing the other.[<u>111</u>]

In addition, the law's rejection of certain methods of obtaining trade secrets and allowance of other methods is consistent with the regulation of competition that underlies intellectual property law. This policy is reflected in the law's balancing of individual rights against societal needs. Society needs competition because it facilitates creative advances that benefit society as a whole by preventing the domination of certain segments of the economy by a single or limited number of individuals or entities. An individual who develops a creative innovation also must have some protection available as an inducement for her to engage in the development of new ideas and technological advances. In recognition of these two goals, trade secret law strikes a balance by prohibiting certain, but not all, methods of obtaining trade secrets. As a general proposition, methods within the domain of fair and equitable competition are permitted. Independent discovery is permitted because it encourages creative activities. Additionally, denying an independent developer the right to use her creation would unfairly penalize her despite her inability to know that another party was already in possession of a trade secret embodying the innovation. Such a result would be unfair, and methods that amount to unfair and inequitable competition are generally prohibited. Obtaining a trade secret via illegal conduct, in breach of a contractual obligation, or in breach of a fiduciary duty is generally actionable.[<u>112</u>]

The conclusion that trade secrets should be accorded property status is consistent with the conclusion that ideas are subject to the same status. Trade secret law is merely an extension of the law of ideas, since trade secrets are merely ideas that are maintained in secrecy and which provide the owner with a competitive advantage. Trade secret law establishes the legal rules that determine the property rights existing in ideas that fall within the definition of a trade secret.

### C. Patent Law

Rights granted by the patent law are in reality specialized property rights[<u>113</u>] granted to certain categories of ideas.[<u>114</u>] The patent law essentially codifies the common law requirements that are prerequisites to an idea being property. Specifically, the novel requirement, which must be satisfied for an idea to be property, is incorporated into the patent law. The statute requires that an invention must be new, and it must not be known, publicly used, or publicly disclosed for it to be potentially granted protective status under the patent law.[<u>115</u>] Additionally, a patent may not be granted when the effect is to remove from or restrict free access to information or knowledge in the public domain.[<u>116</u>] This requirement ensures that an idea in the public domain, which is not property, is not subject to property rights. Such an idea does not fall within the definition of property because if it is in the public domain, it is not subject to the dominion and control of anyone.

Likewise, the concrete requirement is also expressly included in the patent law.[<u>117</u>] A patent will be granted only if the inventor can provide the government with a written description of the invention that explains precisely how to make and use it. The description must be sufficiently adequate for someone skilled in the relevant technology to be able to make and use the invention based on the description.[<u>118</u>] Furthermore, it must describe the best method of using the invention that is known to the inventor.[<u>119</u>] The patent statute also expressly mandates that the invention must be useful [<u>120</u>] and more than a merely obvious new innovation.[<u>121</u>] These requirements are consistent with the application of the concrete requirement in idea cases. The concrete requirement is used to determine, from a policy perspective, which ideas should be subject to property rights based on whether the underlying policies of intellectual property law are furthered. Typically, the concrete requirement is used to ensure that only ideas which secure a benefit for society are granted property status. The usefulness, obviousness, and best method requirements, discussed above, ensure that only ideas that provide societal benefits are granted patent rights.

Additionally, the patent law secures for the public the benefit of the patented innovation in other ways while regulating competition with regard to the innovation. Upon issuance of a patent, the information contained in the patent is immediately available for public inspection. This availability allows the public to secure any benefit that flows from knowledge of the patented invention. Such knowledge may be useful in development of new innovations in other areas, it may spur new and innovative improvements to the patented innovation, or it may provide ideas for alternative inventions. Additionally, patent rights are subject to durational limits so the patent owner has an incentive to make the patented innovation available to the public in order to reap financial rewards before the patent rights terminate.[122] This also allows the public to secure the benefit of the innovation. Finally, at the end of the patent term the innovation is freely available and usable by the public.

Typically, the free accessibility to the patented innovation upon granting of a patent would terminate any property rights in the innovation. Granting exclusive rights to such ideas is "at odds with the inherent free nature of disclosed ideas."[123] Nevertheless, the law grants to the patent owner the exclusive right to make, use, and sell the patented innovation in the United States for a limited time period.[124] Such statutorily granted exclusive rights are necessary to avoid the cessation of property rights in the innovation upon public use or disclosure of the invention. Absent these exclusive rights, the patent owner would be unable to exert dominion and control over the innovation much as the owner of an idea or a trade secret loses control upon public disclosure. Therefore, these statutory rights are necessary for patent rights to be property since they ensure that the patent owner has the right to possess, use, and alienate the patent rights.

This approach also furthers the underlying policies of intellectual property law. It induces an inventor to freely disclose her innovation by granting property rights in the innovation in return for the disclosure. These rights also provide a financial incentive to the inventor. In addition, the durational limit of the property rights is an attempt to regulate competition. After a limited time period, competitors are free to use the patented innovation. However, the property rights provide the inventor with a temporary market advantage. This result is equitable in light of the fact that the inventor is responsible for providing the innovation to the public while subsequent competitors who utilize the innovation are merely getting a free ride by avoiding the research and development costs associated with creation of the innovation.

The property status of patents can be subject to question in several situations. Improvement patents, which are expressly authorized by statute, [<u>125</u>] raise some questions with regard to their property status. Such patents can be granted for improvements in existing patented innovations. While the owner of such a patent has the exclusive right to prevent others from making, using, or selling the improvement, she lacks the right to use the patented improvement herself if using the improvement involves use of the preexisting patented innovation. This lack of a right to use the improvement raises the question of whether something can be subject to property rights absent a right of use. While this conclusion seems contrary to the definition of property rights, it is actually analogous to future interests in realty. Assume you are given a future interest in Blackacre which follows a life estate owned by another individual. Upon receiving the future interest, you have received a property interest even though you have no immediate right to possess or use Blackacre. Your right to possess and use Blackacre only arises upon termination of the life estate. The same is true with regard to the above described improvement patent. The inventor of the improvement simply has a future interest in the improvement provided

by the patent. Once the preexisting patent expires, the inventor will be free to use his improvement without regard to the preexisting patent rights because upon expiration of the preexisting patent, it ceases to be property just as the life estate ceases to be property upon the death of the life estate holder.

Additionally, the patent statute allows an inventor to obtain a patent on an innovation after freely releasing the innovation to the public domain. The only stipulation is that the patent must be applied for within one year of injecting the innovation into the public domain. [126] This requirement produces an anomalous result. An invention can be freely surrendered to the public domain and hence cease to be subject to property rights in any one person. However, if the inventor applies for a patent within one year of this surrender, she obtains exclusive rights in the innovation upon granting of a patent. [127] The invention becomes subject to property rights upon issuance of the patent. This scenario appears to allow an inventor to extinguish property rights by relinquishing control to the public and to recreate the rights by filing for a patent within a year of such relinquishment. The validity of this argument with regard to the property status of patents can be examined via the following example.

Assume X invents a machine on January 1 and publicly discloses it on January 2. Subsequent to this disclosure Y constructs a machine utilizing the technology disclosed by X. On June 1, X applies for a patent on the machine which subsequently issues. Upon issuance of the patent, X has the exclusive rights to make, use, and sell the technology embodied in the machine. Pursuant to her patent rights, X can prevent Y, and anyone else, from using the technology. Can this result be supported by a property theory? At the time the patent issues, is the technological know-how embodied in the machine X's property or has any property status been surrendered by the prior public disclosure of the machine? Arguably, X's disclosure should terminate property rights. Upon her disclosure she has given up any dominion and control over the machine and the ability to alienate it since it is now in the public domain. Under the bundle of rights definition of property, a property interest arguably does not exist in the idea embodied in the machine subsequent to January 2. The subsequent issuance of the patent effectively withdraws an innovation from the public domain.[128]

However, a contrary conclusion can be reached which is consistent with property theory. At the time X developed the innovation it was her idea, and prior to disclosure she had dominion and control over it. Additionally, the patent law created the right for X to receive patent protection for her innovation provided it met the requirements of the patent law. This statutorily created property right under the patent law existed upon development of her innovation. As of that time X had the right to seek patent protection provided she did not abandon her invention or wait more than one year to file subsequent to public use or disclosure of the invention. Consequently, X can be viewed as merely allowing Y to permissively use her property rather than as abandoning or dedicating her innovation to the public. By comparison, if X owned Blackacre she would have the right to deny members of the general public the right to use Blackacre. Nevertheless, if X freely allowed Y to utilize Blackacre, X would not lose her property rights in Blackacre. Y's use would merely be deemed permissive and such use would not divest X of her property interest in Blackacre. Likewise, Y's use of X's innovation can be viewed as merely permissive use.

Another area of concern arises when one person develops an innovation and maintains it as a trade secret while another individual independently develops the same innovation and seeks patent protection for it. The law has developed clear rules as to who has ownership of the innovation in such situations. The question to be addressed, however, is whether those rules are consistent with property law in general. The following hypotheticals examine this question.

Assume that X invents a machine on January 1 and keeps it secret until she files for a patent on January 15. Assume that Y independently invents the same machine on January 10 and that Y maintains her machine as a trade secret. A patent is subsequently issued to X eighteen months later. Under the patent law, X is the owner of the innovation, and she can bar Y's use of it. [129] This result is consistent with property law. Between X and Y, X is the first inventor. Therefore, X is the owner of the innovation based on her being first in time to have possession of the innovation.[130]

Assume that X invents a new chemical compound on January 1, but she abandons it without disclosing it to anyone. Subsequently, on January 5, Y invents the same compound which she maintains as a trade secret. Then on June 1, X applies for a patent on the new chemical compound. Should X be granted the patent? In this situation X is not entitled to obtain a patent because she has abandoned her property interest in the compound.[131] Therefore, Y has a property interest in the compound which she is maintaining as a trade secret. This result is consistent with property law which provides that abandonment of property rights terminates any ownership interest. Additionally, if X subsequently discloses her previously invented chemical compound to the public, Y's property rights will terminate since the trade secret status would end upon public disclosure. The result would be a dedication to the public of the chemical compound. Such a result is consistent with the property interest existing in a trade secret.

Assume that X invents a new process for curing rubber on January 1. X maintains the process as a trade secret. On February 1, Y independently invents the same process. On February 15, Y files a patent application for the process. Two years later the patent issues to Y. Who owns the process after the patent is issued?

Arguably, X is first in time to have possession of the process and that supports her ownership of the process. However, the patent law provides that Y is entitled to the patent in this case because X concealed the process. [132] If Y is entitled to the patent then X's rights must be extinguished if a property theory is applicable. Upon issuance of the patent, as already discussed, the information in the patent is placed in the public domain. Since Y independently developed the process, her public disclosure of the process, via the patent, is analogous to someone independently developing and disclosing a trade secret. Such behavior would end the secret status of the trade secret and terminate its existence. Therefore, the granting of a patent to Y and the termination of X's property rights in the trade secret are consistent with property theory. This result also helps to further secure for the public the benefit of the process and is consistent with an underlying policy of intellectual property law. The public disclosure that accompanies issuance of a patent provides more benefit to the public than the public benefit received if the process was maintained as a secret pursuant to trade secret law.

#### CONCLUSION

A basic or generic definition of property recognizes that property law merely defines the relationship between things and persons. It determines the rights that persons have in things. Typically, the existence of such rights is predicated on two factors: (1) whether the person has sufficient ability to control possession, use, and transferability of the thing; and (2) whether the underlying policies of the law are furthered by bestowing property rights on the thing.

When a person has the unrestricted right to possess, use, and transfer a thing, it is granted property status and the person is the owner of the thing. When a person has no rights of possession, use, and alienation, the thing is denied property status, and it becomes part of the public domain. If the right to possess, use, and transfer a thing is within these two extremes, the determination of whether to grant or withhold property status must be based on what will further the underlying policies of the relevant body of law. This conclusion is supported by the numerous things that are granted property status despite the existence of limitations and restrictions on the possession, use, or transferability of the thing.

There are two basic underlying policies of intellectual property law. The first is to secure for the public the benefits of intellectual property. Granting property status to ideas provides an incentive for innovators to develop new ideas by giving the innovator the right to control use of the idea. As a result, the public will gain the benefit of the idea because economic motives will spur the innovator to share it with the public.

The second policy underlying intellectual property law is to regulate and manage competition. Innovators should be entitled to monetary gain from their ideas. Nevertheless, the control of ideas is inimical to a free society because it may allow monopolization of ideas. Therefore, intellectual property law attempts to regulate or manage competition by granting or withholding property status. This regulation strikes a balance between rewarding a person for intellectual achievement and the societal importance of maintaining marketplace competition.

The granting of property status to ideas is consistent with the basic definition of property. Ideas that can be exclusively possessed, used, and transferred by a person are granted property status. Once control of an idea is lost to the public, property status ends. The concept of novelty has been developed to determine whether a person has control of an idea. If a person develops a new idea that is not generally known, the idea is novel and potentially subject to property status. This result is consistent with the basic definition of property because it recognizes that an idea that is both new and not generally known can be controlled by its creator. Likewise, an idea which is not new or is generally known cannot be controlled by an individual; hence, it is not appropriate subject matter for property status.

In addition, the underlying policies of intellectual property law may be frustrated by granting certain novel ideas property status. Consequently, the concept of concreteness has developed to determine which novel ideas are appropriate for property status. If attaching property rights to a novel idea will secure a benefit to the public, the novel idea is granted property status. Furthermore, granting an idea property status is appropriate if it will result in a balance of the creator's individual rights in the idea with maintaining competition. Under this approach, mere untested and undeveloped ideas are denied property status on lack of concreteness grounds without regard to their novelty. In contrast, novel ideas that have been reduced to a working form are worthy of property status. The concreteness determination merely represents a determination of whether assigning or denying property rights to the idea will further or frustrate, respectively, the policies of intellectual property law.

The protection of ideas pursuant to trade secret law represents a specialized body of law for protecting a specific type of idea. Ideas used in a business are subject to protection via trade secret law if they are not generally known and they are maintained in secret by the business owner. Additionally, the trade secret must have value by providing a competitive advantage. These requirements are consistent with the novel and concreteness requirements for common law idea protection.

The requirement that the trade secret is not generally known ensures control of it by the owner. This requirement is necessary for the trade secret to have property status. Maintaining the secrecy of the trade secret is also consistent with ensuring control over it. Once secrecy is lost, the trade secret is in the public domain, and the owner has lost control of it. This is consistent with trade secret status terminating upon public disclosure as a result of independent development or reverse engineering.

Trade secret law requires only reasonable secrecy efforts rather than absolute secrecy. This standard is necessary to maintain marketplace competition since absolute secrecy could be more costly than the economic advantage provided by the trade secret.

The requirement that a trade secret must have actual or potential value is consistent with the concrete requirement. The concrete requirement ensures that granting property status secures a benefit for the public. Likewise, the value requirement provides that trade secret status is reserved for ideas that can provide a benefit to the public.

Trade secret law requires that alienation of trade secrets must be in confidence pursuant to an agreement that the transferee maintain secrecy. This mandate is also consistent with the basic definition of property. Property status in an idea ceases to exist once an idea is beyond the control of its owner; consequently, transfers must require secrecy to ensure the continuation of the property status of a trade secret.

The patent law also represents a system designed to provide exceptional rights to certain specific categories of ideas. Ideas which fall within the realm of patent law are subject to exclusive rights of control for a substantial time period, and these rights are unaffected by independent development or reverse engineering. Nevertheless, the basic requirements of common law idea protection are codified in the patent law. The novel requirement is a statutory prerequisite to patent protection, and the concrete requirement is also codified. A written description that explains precisely how to make and use the best mode of the invention must be provided. The description must be adequate for someone skilled in the relevant art to make and use the invention. Additionally, the idea must be useful, and it must be more than a mere obvious innovation to someone skilled in the art.

The patent law also furthers the underlying policies of intellectual property law. The mandatory public disclosure of patents ensures public access to the ideas and knowledge protected by patent law. The durational limitation of patent rights spurs patent owners to make their ideas available to the public so they can reap financial rewards. Consequently, the public gains the benefit of the idea and therefore fulfills an underlying goal of intellectual property law. Additionally, the exclusive rights granted to a patent owner provide strong inducement to disclose the idea as a necessary aspect of obtaining a patent.

## FOOTNOTES

1. Professor of Law, Ohio Northern University Pettit College of Law, Ada, Ohio.

2. RESTATEMENT (FIRST) OF PROPERTY, ch. 1, Introduction at 3 (1936). The existence of property rights is also one of the essential differences between capitalism and Marxism. Paul Heckel, Proprietary Rights: The Software-Patent Controversy, 9 No. 12 COMPUTER LAW. 13, at 14 (December, 1992).

3. JOHN E. CRIBBET & CORWIN W. JOHNSON, PRINCIPLES OF THE LAW OF PROPERTY 4 (3d ed. 1989). "Property and law are born together, and die together. Before laws were made there was no property; take away laws and property ceases." Id. (quoting Jeremy Bentham, Theory of Legislation, Principles of the Civil Code, pt. I, at 112 (Charles Kay Ogden ed. & Etienne Dumont & Richard Hildreth trans. 1864)).

4. See United States v. General Motors Corp., 323 U.S. 373, 377-78 (1945) (the Court stated that the term "property" used in the Takings Clause of the Constitution did not mean physical things, but rather the group of rights defining the relationship between an individual and the thing).

5. See, e.g., Article 2 of the Uniform Commercial Code which applies to contracts governing the sale of "goods." Rather than defining the scope of Article 2 in property terms, it defines it in terms of tangible things. Section 2-105 states "[g]oods means all things . . . which are movable at the time of identification to the contract for sale . . . ." U.C.C. . 2-105 (1993).

6. In Yuba River Power Co. v. Nevada Irrigation Dist., 279 P. 128, 129 (Cal. 1929), the California Supreme Court stated that property interests could exist in "every species of estate, real and personal, and everything which one person can own and transfer to another. It extends to every species of right and interest capable of being enjoyed as such upon which it is practicable to place a money value." (citations omitted). The Supreme Court had determined that numerous interests other than realty are property under the Takings Clause of the Constitution. See, e.g., Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1003-04 (1984) (trade secrets); Armstrong v. United States, 364 U.S. 40, 44, 46 (1960) (materialman's lien pursuant to state law); Louisville Joint Stock Land Bank v. Radford, 295 U.S. 555, 596- 602 (1935) (real estate lien); Lynch v. United States, 292 U.S. 571, 579 (1934) (valid contracts). See also Early v. Early, 604 N.E.2d 17 (Mass. 1992) (pension benefits treated as property in divorce proceeding dividing property); ARTHUR L. CORBIN, CORBIN ON CONTRACTS 860, at 791 (1952) (contract rights are the subject matter of property rights).

7. Felix S. Cohen, Dialogue on Private Property, 9 RUTGERS L. REV. 357, 374 (1954). See International News Serv. v. Associated Press, 248 U.S. 215 (1918). "Property depends upon exclusion by law from interference." Id. at 246 (Holmes, J., dissenting). "An essential element of individual property is the legal right to exclude others from enjoying it." Id. at 250 (Brandeis, J., dissenting). See also Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1003 (1984) (noting Blackstone's and Locke's notion that property is broader than realty and tangible goods because it "includes the products of an individual's 'labour and invention.'"); Carol M. Rose, Possession as the Origin of Property, 52 U. CHI. L. REV. 73 (1985) (under the common law possession is the origin of property).

8. Richard A. Epstein, Possession as the Root of Title, 13 GA. L. REV. 1221 (1979); see Alevizos v. Metropolitan Airports Comm'n of Minneapolis & St. Paul, 216 N.W.2d 651, 661 (Minn. 1974); Smith v. Erie R.R. Co., 16 N.E.2d 310, 313 (Ohio 1938). See also Moore v. Regents of the Univ. of Cal., 271 Cal. Rptr. 146, 176 (Cal. 1990) (Mosk, J., dissenting) (Property is a bundle of rights including the right to possession of the property, use of the property, exclusion of others from the property, and the right to dispose of the property by sale or gift.), cert. denied, 449 U.S. 936 (1991). See generally United States v. General Motors Corp., 323 U.S. 373, 377-78 (1945).

9. For example, granting a license, a profit, or an easement in realty amounts to disposal of the owner's exclusive use rights in the realty.

10. "Every landowner must continue to endure that level of inconvenience, discomfort, and loss of peace and quiet which can be reasonably anticipated by any average member of a vibrant and progressive society." Alevizos v. Metropolitan Airports Comm'n of Minneapolis & St. Paul, 216 N.W.2d 651, 662 (Minn. 1974).

11. In its simplest form, private nuisance law states that an owner of property rights is free to exercise her property rights as she sees fit, provided such exercise does not unreasonably interfere with the ability of another owner of property rights to exercise her property rights as she desires. See generally ROGER A. CUNNINGHAM ET AL., THE LAW OF PROPERTY 7.2, at 417 (2d ed. 1993).

12. Factors to be considered in this balancing include the following: whether the activity is customary or suited to the area; whether the activity causes observable effects that most of us would find disagreeable, independent of whether they actually harm the party alleging a nuisance; whether the activity is carried on by methods that produce more disturbance than other available methods; the value of the activity to the person engaging in it; the value of the activity to society; and when the activity was begun. Id. at 418.

13. Id. at 421.

14. See Pennell v. City of San Jose, 485 U.S. 1, 11-15 (1988).

15. 11 U.S.C. 548(a) (1988 & Supp. IV 1992).

16. See, e.g., Moore v. Regents of the Univ. of Cal., 271 Cal. Rptr. 146, 177 & n.10 (Cal. 1990) (Mosk, J., dissenting) (under California law a licensed sportswoman can give away wild fish and game that she has caught or killed, but she cannot sell them), cert. denied, 449 U.S. 936 (1991). See generally CAL. FISH & GAME CODE, 3039, 7121 (1984 & West Supp. 1993).

17. See, e.g., O'Brien v. O'Brien, 485 N.Y.S.2d 548, 549-50 (N.Y. App. Div. 1985) (court stated medical license not property, in part because it cannot be inherited, transferred, or pledged).

18. See Moore v. Regents of the Univ. of Cal., 271 Cal. Rptr. 146, 158-59 (Cal. 1990), cert. denied, 449 U.S. 936 (1991).

19. The court stated that "the statute eliminates so many of the rights ordinarily attached to property that one cannot simply assume what is left amounts to `property' or `ownership' for purposes of conversion law." Id. at 159.

20. See generally Sproul v. Gilbert, 359 P.2d 543 (Or. 1961). In Sproul, the court stated the following test to evaluate the property interest of a property occupant: "Does he have sufficient control over the premises to warrant the label of possession?" Id. at 550. The court applied that test to grazing permits granted to individuals that allowed them to graze their livestock on federal land. The court first evaluated the various possible uses of the land at issue. It then examined the amount of control the permit holders had over the different possible uses of the land. The court found that the permit holders had significant control over only one use of the land (i.e., grazing). However, the court concluded that grazing was one of the only major uses of the land, and therefore, the permit holders had sufficient control over the land to say that they had possession of the land. Consequently, the court held that the permit holders had a property interest in the land which made them subject to property tax liability.

21. See CUNNINGHAM, supra note 10, 3.1, at 85-87.

22. John Chipman Gray's generally accepted statement of the rule is the following: "No interest is good unless it must vest, if at all, no later than twenty-one years after some life in being at the creation of the interest." RALPH E. BOYER, SURVEY OF THE LAW OF PROPERTY 158 (3d ed. 1981) (quoting from JOHN C. GRAY, RULE AGAINST PERPETUITIES 191 (4th ed. 1942)).

23. The owners of future interests are granted the right to bring an action for waste against the party in possession of the property at issue. Waste is defined as "an unreasonable use of the property by the owner of the possessory estate which reduces the value of a future estate." OLIN L. BROWDER ET AL., BASIC PROPERTY LAW 253 (5th ed. 1989). See, e.g., Brokaw v. Fairchild, 237 N.Y.S. 6 (N.Y. Sup. Ct. 1926) (future interest owner succeeded in prohibiting a life estate owner from demolishing a house which could not be rented and erecting an apartment house under a waste theory), aff'd, 245 N.Y.S. 402 (N.Y. App. Div. 1930), aff'd, 177 N.E. 186 (N.Y. 1931).

24. See CORNELIUS J. MOYNIHAN, INTRODUCTION TO THE LAW OF REAL PROPERTY 7, at 110 (2d ed. 1988). Today, most contingent future interests are alienable. Id. at 110-11.

25. See CUNNINGHAM, supra note 10, at 85-87.

26. See U.S. CONST. amend. V, which states that ". . . private property [shall not] be taken for public use, without just compensation."

27. See Lucas v. South Carolina Coastal Council, 112 S. Ct. 2886, 2893-94 (1992). See also Penn Central Transp. Co. v. City of New York, 438 U.S. 104 (1978) (landmark preservation law which prohibited property owner from constructing a multi-story office building over designated landmark was not a taking).

28. Rent control statutes may significantly interfere with the use of residential rental property. Nevertheless, such interference with property rights is permissible governmental action which is not a "taking" under the Fifth Amendment. See Pennell v. City of San Jose, 485 U.S. 1 (1988).

29. See generally U.S. CONST. art. I, sec. 8, cl. 8, which states that "[t]he Congress shall have power . . . [t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries . . . ." This clause provides congressional authority for the Patent law (see 35 U.S.C. 1-376 (1988)) and the Copyright law (see 17 U.S.C. .. 101-810 (1988)).

30. See Stanley v. Columbia Broadcasting Sys., Inc., 221 P.2d 73, 84-85 (Cal. 1950) (Traynor, J., dissenting) (law must balance granting individuals reward for their creativity with securing for society benefits of such creativity).

31. "The necessity of good faith and honest, fair dealing, is the very life and spirit of the commercial world." Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 481-82 (1974) (quoting National Tube Co. v. Eastern Tube Co., 3 Ohio C.C. (n.s.) at 462). See also E.I. duPont deNemours & Co. v. Christopher, 431 F.2d 1012, 1016 (5th Cir. 1970) ("[o]ur devotion to free wheeling industrial competition must not force us into accepting the law of the jungle as the standard of morality expected in our commercial relations."), cert. denied, 400 U.S. 1024 (1971). See generally Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 481 ("The maintenance of standards of commercial ethics and the encouragement of invention are the broadly stated policies behind trade secret law.").

32. This is evident by reference to the antitrust laws. For example, unreasonable restraints of trade and attempts to monopolize a market can be felonies punishable by fines up to one million dollars and imprisonment. See 15 U.S.C. 1-2 (1988) (Sherman Act). Another section of the antitrust law mandates trebling of damages and payment of reasonable attorney fees by the losing party. See 15 U.S.C. 15 (1988) (Clayton Act). Finally, an assortment of injunctive relief is available upon a mere showing of potential competitive injury. See, e.g., 15 U.S.C. 18 & 26 (1988) (business merger that may substantially lessen competition or tend to create a monopoly can be enjoined). See also 15 U.S.C. 45 (1988) (Federal Trade Commission Act) (which states that "[u]nfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices in or affecting commerce, are hereby declared unlawful.").

33. 433 U.S. 36 (1977).

34. Id. at 38.

35. 15 U.S.C. 1 (1988) (Sherman Act).

36. "[I]ntrabrand competition is the competition between the distributors -- wholesale or retail -- of the product of a particular manufacturer." Continental, 433 U.S. at 52 n.19.

37. "Interbrand competition is the competition among the manufacturers of the same generic product . . . ." Id.

38. 472 U.S. 585 (1985).

39. ld. at 591 n.9.

40. ld. at 598 n.23.

41. United States v. Aluminum Co. of Am., 148 F.2d 416 (2d Cir. 1945).

42. Id. at 430.

43. They are not the building blocks of all innovations because some innovations are the result of mistakes or accidental discoveries. It has been argued by some that ideas should not be protected. One commentator stated that

All men have a tendency to copy and adapt ideas; if they did not, we would never have gotten far . . . Indeed, the trait is not confined to the human race; and the copying of ideas cannot be too evil, for, as the elder Dumas said, God created man but even He could not avoid the use of a Prototype.

Harry R. Olsson, Jr., Dreams for Sale, 23 LAW. & CONTEMP. PROBS. 34, 61 (1958). In contrast, one state provides statutory protection for certain products of the mind. CAL. CIV. CODE .. 980-990 (West Cum. Supp. 1993).

44. See, e.g., Sellers v. American Broadcasting Co., 668 F.2d 1207, 1210 (11th Cir. 1982) (an idea or theory must be "novel," among other things, for an action for misappropriation to prevail); see also Granoff v. Merrill Lynch & Co., Inc., 775 F. Supp. 621, 627 (S.D.N.Y. 1991), aff'd without opinion, 962 F.2d 2 (2d Cir. 1992).

45. One commentator concludes that a novel idea is one that is new or not formerly known. Melville B. Nimmer, The Law of Ideas, 27 S. CAL. L. REV. 119, 144 (1954). See also Margreth Barrett, The "Law of Ideas" Reconsidered, 71 J. PAT. [& TRADEMARK] OFF. SOC'Y 691, 710-12 (1989) (discussion of the novelty requirement).

46. Hamilton Nat'l Bank v. Belt, 210 F.2d 706, 709 (D.C. Cir. 1953) (the law protecting ideas "must be careful to avoid attributing to individual ownership that which is in reality common property . . . .").

47. Murray v. National Broadcasting Co., Inc., 844 F.2d 988, 993 (2d. Cir.), cert. denied, 488 U.S. 955 (1988).

48. Sellers v. American Broadcasting Co., 668 F.2d 1207 (11th Cir. 1982).

49. Id. at 1209.

50. Id.

51. ld. at 1210 & n.5.

52. Granoff v. Merrill Lynch & Co., Inc., 775 F. Supp. 621 (S.D.N.Y. 1991), aff'd without opinion, 962 F.2d 2 (2d Cir. 1992).

53. Id. at 630.

54. How J. Ryan & Assoc. v. Century Brewing Ass'n, 55 P.2d 1053 (Wash. 1936).

55. Marcus Advertising, Inc. v. M.M. Fisher Assoc., Inc., 444 F.2d 1061 (7th Cir. 1971).

56. Downey v. General Foods Corp., 286 N.E.2d 257 (N.Y. 1972).

57. Many courts have concluded that protecting ideas as property would allow an idea to be removed from the public domain thereby reducing the ideas available for development and exploitation. Nimmer, supra note 44, at 120.

58. Richter v. Westab, Inc., 529 F.2d 896 (6th Cir. 1976).

59. Id. at 898.

60. Masline v. New York, N. H. & H. R. Co., 112 A. 639 (Conn. 1921).

61. Id. at 641.

62. In Hamilton National Bank v. Belt, 210 F.2d 706 (D.C. Cir. 1953), the court noted that in the field of radio broadcasting a continuum existed with regard to when ideas for radio shows would be protectible. At the first end of the continuum exists a "mere generality" for a radio show which is unprotectible. At the opposite end of the continuum is "a full script containing the words to be uttered and delineating the action to be portrayed" which is protectible. Id. at 709. If an idea falls between the two ends of the continuum, the idea must be evaluated to determine if it is far enough along on the continuum to be protectible as property. Id. at 709-10. See also Bowen v. Yankee Network, 46 F. Supp. 62, 63-64 (D. Mass. 1942) (idea must be fixed in some concrete form before property rights can arise); Educational Sales Programs, Inc. v. Dreyfus Corp., 317 N.Y.S.2d 840, 843 (N.Y. Sup. Ct. 1970) ("Not every `good idea' is a legally protectible idea.").

63. In Belt v. Hamilton National Bank, 108 F. Supp. 689, 691 (D.D.C. 1952), the court stated that an idea "must be more than a mere abstraction" to be protected by property law. It must be novel and reduced to a concrete detailed form.

64. See Richter v. Westab, Inc., 529 F.2d 896 (6th Cir. 1976)

The law does not favor the protection of abstract ideas as the property of the originator. An idea should be free for all to use at least until someone is able to translate such idea into a sufficiently useful form that it may be patented or copyrighted. Thus competition in the use of ideas is a social good, hastening the process of invention.

Id. at 902. See also Stanley v. Columbia Broadcasting Sys., Inc., 221 P.2d 73, 84 (Cal. 1950) (Traynor, J., dissenting).

65. See Pierson v. Post, 3 Cai. R. 175 (N.Y. Sup. Ct. 1805).

66. "In essence the requirement of concreteness would seem to be but another way of requiring that the idea be sufficiently developed so as to constitute `property." Nimmer, supra note 44, at 140. See also Barrett, supra note 44, at 712-16 (discussion of the concrete requirement).

67. Frequently, courts assert the novelty and concrete requirements as prerequisites to any cause of action involving an idea. See, e.g., Bowen v. Yankee Network, Inc., 46 F. Supp. 62, 63 (D. Mass. 1942) ("Ideas not reduced to concrete form are not protected."); Bram v. Dannon Milk Prod., Inc., 307 N.Y.S.2d 571 (N.Y. App. Div. 1970) ("Lack of novelty in an idea is fatal to any cause of action for its unlawful use."); Ed Graham Prod., Inc. v. National Broadcasting Co., Inc., 347 N.Y.S.2d 766, 769 (N.Y. Sup. Ct. 1973) ("where plaintiff's idea is wholly lacking in novelty, no cause of action in contract or tort can stand for the alleged misappropriation of that idea.").

This analysis is misouided. A cause of action for use of an idea based on breach of an express or implied contract should be evaluated under a contract theory, not a property theory. If the elements of offer, acceptance, and consideration are present, an enforceable contractual bargain exists. This can best be understood by comparing contracts for the sale of a car with the sale of an idea. If A agrees to sell B a car, a contract exists. If A does not own the car, even though B is unaware, a contract still exists. If both A and B know the car belongs to X, consideration is absent, and a contract does not exist. Therefore, if A agrees to sell B an idea. the existence of a valid contract depends on the knowledge of both A and B with regard to who owns the idea that is the subject of the agreement. If the idea is not novel, A does not own the idea, which means that others have access and the right to use the idea. Nevertheless, if B is unaware of the idea, a contract between A and B to sell the idea to B is created. If the contract for sale of the idea involves an idea that both A and B are aware of, then consideration is lacking, and no contract is created. If an idea lacks novelty, it is in the public domain. Therefore, it could be argued that public domain status provides everyone with knowledge of the idea such that an agreement to sell such an idea is not an enforceable contract, for lack of consideration. However, not everyone may be aware of the public domain status of an idea. If B is actually unaware that a particular idea is in the public domain and she enters a contract to purchase that idea from A, an enforceable contract should exist. If B is actually unaware that the idea she contracts to buy is in the public domain, such a contract is a benefit to her since it gives her access to an idea of which she was previously unaware. See Aronson v. Quick Point Pencil Co., 440 U.S. 257 (1979) (enforcing contract to pay royalties on new keyholder design despite public domain status of design); Stanley v. Columbia Broadcasting Sys., Inc., 221 P.2d 73, 85 (Cal. 1950) (disclosure of a public domain idea can still be consideration for and subject of enforceable contract). But see Sellers v. American Broadcasting Co., 668 F.2d 1207, 1210 n.5 (11th Cir. 1982); Granoff v. Merrill Lynch & Co., Inc., 775 F. Supp. 621, 627 (S.D.N.Y. 1991) (disclosure of idea cannot be consideration for a contract when idea is not novel); Schonwald v. F. Burkart Mfg. Co., 202 S.W.2d 7, 13 (Mo. 1947) ("contracts to disclose ideas, which are widely known and generally understood, are held to have no validity. When ideas . . . are so known and understood by most people, contracts for their disclosure may well be said to be without consideration . . . .").

Additionally, disclosure of an idea pursuant to a contract can be viewed as a service. Therefore, the novelty or concreteness of the idea should be irrelevant. Nimmer, supra note 44, at 129-30. "The lawyer or doctor who applies specialized knowledge to a state of facts and gives advice for a fee is selling and conveying an idea. In doing so he is rendering a service" for which he is entitled to be compensated without regard to whether the idea conveyed is novel or concrete. Desny v. Wilder, 299 P.2d 257, 266 (Cal. 1956).

Protection of an idea via contract law does not interfere with the underlying policies of intellectual property law. A contract is effective only between the parties to the contract. It does not withdraw the idea from the public domain. Anyone not a party to the contract can freely use the idea. Stanley v. Columbia Broadcasting Sys., Inc., 221 P.2d 73, 85 (Cal. 1950) (Traynor, J., dissenting).

68. This analytical approach is similar to the approach used in the tort action of negligence. Negligence requires a showing of causation which comprises establishing both "but for" causation and "proximate cause." The chain of causation under the "but for" test would be very long in many situations. However, the law recognizes from a policy perspective that causation must be cutoff at some point. This is the purpose of "proximate cause." If policy or equity dictates extending liability to someone in the "but for" causation chain, then proximate cause is found to exist. However, if policy or equity dictates immunizing someone in the "but for" causation chain from liability, a finding of no "proximate cause" is made.

69. See Official Airlines Schedule Info. Serv., Inc. v. Eastern Air Lines, Inc., 333 F.2d 672, 676 (5th Cir. 1964) (releasing novel idea for a radio show into the public domain by public broadcasting vitiated property rights in the idea).

70. RESTATEMENT (FIRST) OF TORTS 757, cmt. b (1939). For a review of decisions adopting this definition, see JAY DRATLER, JR., INTELLECTUAL PROPERTY LAW: COMMERCIAL, CREATIVE, AND INDUSTRIAL PROPERTY 4.02[1], at 4-11 nn.4-5 (1993), and ROGER M. MILGRIM, MILGRIM ON TRADE SECRETS 2.01, at 2-3 n.2 (1992).

71. UNIFORM TRADE SECRETS ACT 1-11, 14 U.L.A. 433 (1985).

72. UNIFORM TRADE SECRETS ACT, 14 U.L.A. 78 (Supp. 1993). This act has been adopted by thirty-eight jurisdictions.

73. UNIFORM TRADE SECRETS ACT 1(4), 14 U.L.A. 438 (1985).

74. DRATLER, supra note 69, 4.02[1], at 4-11 to 4-12. See Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 475 (1974) ("The subject of a trade secret must be secret, and must not be of public knowledge or of a general knowledge in the trade or business."). See also Philip L. Burke, The `Non-Informing Public Use' Concept and its Application to Patent-Trade Secret Conflicts, 63 J. PAT. [& TRADEMARK] OFF. SOC'Y 459, 465-68 (1981).

75. See Lehman v. Dow Jones & Co., Inc., 783 F.2d 285, 298 (2d Cir. 1986).

76. The Official Comment to section 1 of the Uniform Trade Secrets Act states:

[t]he definition of "trade secret" contains a reasonable departure from the Restatement of Torts (First) definition which required that a trade secret be "continuously used in one's business." The [Uniform Act] definition . . . extends protection to a plaintiff who has not yet had an opportunity or acquired the means to put a trade secret to use.

UNIFORM TRADE SECRETS ACT 1, cmt., 14 U.L.A. 439 (1985).

77. DRATLER, supra note 69, 4.03[3], at 4-37.

78. What constitutes reasonable secrecy efforts can often be determined by a mathematical comparison of the value of the trade secret with the costs of various levels of secrecy. For example, if a secret manufacturing process has a potential value of nine hundred million dollars, an expenditure of one million dollars to maintain its secrecy may be reasonable. In contrast, if a trade secret only has a potential value of five hundred thousand dollars, an expenditure of four hundred thousand dollars to protect its secrecy may be unreasonable. See DRATLER, supra note 69, 4.03[3][a], at 4-42.

79. Courts generally require some degree of originality, novelty, invention, or discovery before trade secret status is found to exist. Despite the different terminology, such requirements are really a short-hand way of determining if the know-how at issue is generally known and therefore not subject to possession, or whether it was not generally known and therefore subject to possession by anyone. See MILGRIM, supra note 69, 2.08, at 2- 191. See also Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 476-77 (1974).

80. See, e.g., Forest Lab., Inc. v. Formulations, Inc., 299 F. Supp. 202 (E.D. Wis. 1969) (novelty unnecessary), rev'd in part, 452 F.2d 621 (7th Cir. 1971); Sarkes Tarzian, Inc. v. Audio Devices, Inc., 166 F. Supp. 250, 265 (S.D. Cal. 1958) (some degree of novelty required), aff'd, 283 F.2d 695 (9th Cir. 1960), cert. denied, 365 U.S. 869 (1961). See also MILGRIM, supra note 69, 2.08, at 2-191.

81. See 35 U.S.C. 103 (1988). However, this use of novelty is actually inaccurate since under the patent law, novelty means an invention that is new and original to the inventor. Id. at 102. Limiting patent rights to inventions that are more than mere obvious advances in technology is defined as the non-obvious requirement. Id. at 103.

82. See Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 476 (1974) ("Novelty, in the patent law sense, is not required for a trade secret . . . .").

83. ld.

84. Id. See also DRATLER, supra note 69, 4.04[2][c], at 4-60 to 4-61.

85. MILGRIM, supra note 69, 2.05[1], at 2-82.

86. Id. 5.04[1], at 5-139.

87. Id. 2.08[3], at 2-209. See also UNIFORM TRADE SECRETS ACT, 1, cmt., 14 U.L.A. 439 (1985) ("Because a trade secret need not be exclusive to confer a competitive advantage, different independent developers can acquire rights in the same trade secret.").

88. See Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 475 (1974).

89. See Forest Lab., Inc. v. Formulations, Inc., 299 F. Supp. 202 (E.D. Wis. 1969), rev'd in part, 452 F.2d 621 (7th Cir. 1971). See also RESTATEMENT (FIRST) OF TORTS 757 (1939) which states: "One who discloses or uses another's trade secret, without a privilege to do so, is liable to the other if . . . his disclosure or use constitutes a breach of confidence reposed in him by the other in disclosing the secret to him . . . ." In addition to a contractual basis for maintaining secrecy, the existence of certain relationships may require a party to maintain secret know-how in confidence. For example, a fiduciary relationship, which normally arises between employers and employees and between principals and agents, may require an employee or agent to maintain the confidences of her employer or principal. See RESTATEMENT (SECOND) OF AGENCY 13, 387, 395 (1958).

90. See Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1002 (1984).

91. See MILGRIM, supra note 69, 2.05[1], at 2-82 (courts uniformly agree that an unprotected disclosure of secret know-how terminates its trade secret status). See also Egbert v. Lippmann, 104 U.S. 333 (1881) (finding unrestricted disclosure of invention to one person was public use of invention under patent law). See generally Videotronics, Inc. v. Bend Electronics, 564 F. Supp. 1471, 1475 (D. Nev. 1983) (public disclosure of trade secret destroys basis of trade secret protection).

92. See, e.g., Cyborg Sys., Inc. v. Management Science Am., Inc., 1978-1 Trade Cas. (CCH) 61,927 (N.D. III. 1978) (disclosure of software, subject to a confidential agreement, to more than 1,300 customers did not destroy proprietary nature of the software).

93. See Lehman v. Dow Jones & Co., Inc., 783 F.2d 285, 298 (2d Cir. 1986).

94. See UNIFORM TRADE SECRETS ACT 1(4), 14 U.L.A. 438 (1985).

95. See, e.g., Victor Chem. Works v. Iliff, 132 N.E. 806, 812 (III. 1921). See also DRATLER, supra note 69, 4.02[4], at 4- 17. See generally MILGRIM, supra note 69, 2.02, at 2-29.

96. See, e.g., Graham v. Safe Harbor Water Power Corp., 173 A. 311, 312 (Pa. 1934). See also Silverman v. CBS, Inc., 870 F.2d 40 (2d Cir.) (non-use of trademarks for twenty-one years held not to be abandonment of trademarks), cert. denied, 492 U.S. 907 (1989).

97. See, e.g., Roebuck v. Mecosta County Rd. Comm'n, 229 N.W.2d 343, 345-46 (Mich. Ct. App. 1975); Lindsey v. Clark, 69 S.E.2d 342, 344 (Va. 1952).

98. Courtesy Temporary Serv. v. Camacho, Inc., 272 Cal. Rptr. 352, 357 (Cal. Ct. App. 1990).

99. See, e.g., Ferroline Corp. v. General Aniline & Film Corp., 207 F.2d 912, 921 (7th Cir. 1953), cert.denied, 347 U.S. 953 (1954); Courtesy Temporary Serv. v. Camacho, Inc., 272 Cal. Rptr. 352, 357 (Cal. Ct. App. 1990); Sinclair v. Aquarius Elec., Inc., 116 Cal. Rptr. 654, 658 (Cal. Ct. App. 1974).

100. UNIFORM TRADE SECRETS ACT, 1, cmt., 14 U.L.A. 439 (1985).

101. ld. 1(4)(i), at 438.

102. Jones v. Ulrich, 95 N.E.2d 113, 118 (III. App. Ct. 1950).

103. Inadequate capitalization is a significant problem facing many small and medium-size business enterprises and is a frequent cause of business failure. Andrew Beckerman-Rodau, Selecting a Business Entity for a Small Business: Non-Tax Considerations, 93 DICK. L. REV. 519, 539 (1989).

104. The current draft of the new RESTATEMENT (THIRD) OF UNFAIR COMPETITION appears to adopt the value standard. Section 39 of the Restatement defines a trade secret as "any information that can be used in the operation of a business or other enterprise and that is sufficiently valuable and secret to afford an actual or potential economic advantage over others." 61 U.S.L.W. 2713 (May 25, 1993) (quoting from the RESTATEMENT (THIRD) OF UNFAIR COMPETITION (tentative draft, 1993)).

105. See supra note 63 and accompanying text.

106. The legislative history of the Uniform Trade Secrets Act expressly states that negative information can be a trade secret. UNIFORM TRADE SECRETS ACT, 1, cmt., 14 U.L.A. 439 (1985).

107. Authority exists under the Restatement definition of trade secrets that negative information cannot be a trade secret because the use requirement is not satisfied. See DRATLER, supra note 69, 4.02[4], at 4-17.

108. See E. I. duPont deNemours & Co. v. Christopher, 431 F.2d 1012 (5th Cir. 1970), cert. denied, 400 U.S. 1024 (1971).

109. See MILGRIM, supra note 69, 1.08, at 1-55 to 1-59 (discussion of cases that reject property theory for trade secrets). See also DRATLER, supra note 69, 4.04[6], at 4-70 to 4-71. But see Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1001-04 (1984) (trade secrets held to be property under Fifth Amendment Takings clause); Spiselman v. Rabinowitz, 61 N.Y.S.2d 138, 140 (N.Y. App. Div. 1946) (stating that trade secrets are property).

110. In Bove v. Donner-Hanna Coke Corp., 258 N.Y.S. 229 (N.Y. App. Div. 1932), an industrial plant, located adjacent to plaintiff's property, ran twenty-four hours per day. The plaintiff alleged that the plant produced an unusual amount of dirt and soot that prevented her from opening certain windows in her house, affected her health, and reduced the rental value of the apartments located on her property. Despite the fact that plaintiff lived on the property prior to the plant opening, the court refused to enjoin the plant operation or to require the plant to compensate plaintiff.

111. A tenancy by the entirety interest is not subject to attachment by a creditor of only the husband or the wife. In contrast, upon divorce the tenancy by the entireties interest is converted into a tenancy in common, and a creditor of either the husband or the wife can acquire the husband's or the wife's interest. Consequently, the permissible action of divorce by one of the parties destroys part of the property rights of the husband and wife. See CUNNINGHAM, supra note 10, 5.5, at 202- 08.

112. Trade secret law prohibits commercially immoral methods, even if they are legal, in furtherance of its underlying policy of regulating competition to achieve fairness in business practices among competitors. See E. I. duPont deNemours & Co. v. Christopher, 431 F.2d 1012 (5th Cir. 1970), cert. denied, 400 U.S. 1024 (1971) (legal airplane flight over competitor's under construction plant in order to learn about industrial process to be used in the plant was commercially unfair and therefore an improper means of obtaining information).

113. The patent law states that "patents shall have the attributes of personal property." 35 U.S.C. 261 (1988).

114. Patent rights are limited to "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof," (35 U.S.C. 101 (1988)), "any new, original and ornamental design for an article of manufacture," (35 U.S.C. 171 (1988)), and new and distinct plant varieties that are asexually reproduced. (35 U.S.C. 161 (1988)). Additionally, patent rights can be granted only for new innovations that are non-obvious to someone skilled in the relevant technology. 35 U.S.C. 103 (1988).

115. 35 U.S.C. 102(a)-(b) (1988). See also 35 U.S.C. 101 (1988) (invention must be "new"); 35 U.S.C. 171 (1988) (design must be "new" and "original"); 35 U.S.C. 161 (1988) (plant must be "new").

116. See Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 6 (1966).

117. See 35 U.S.C. 112 (1988).

118. ld.

119. ld.

120. ld. 101.

121. Id. 103. See also Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 17-18 (1966) (stating the multi-part test for determining if an invention is obvious).

122. A patent term is typically seventeen years. 35 U.S.C. 154 (1988). Patents issued for ornamental designs have a fourteen year term. Id. 173. In certain limited cases, a patent term can be extended. Id. 155-56.

123. Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 9 (1966).

124. See 35 U.S.C. 271(a) (1988).

125. ld. 101.

126. Id. 102(b). Additionally, an innovation can be placed in the public domain for longer than one year without abandonment of patent rights if such public use is necessary for experimental purposes in order to perfect the invention. This additional time period is granted pursuant to a judicially created doctrine. City of Elizabeth v. American Nicholson Pavement Co., 97 U.S. 126 (1877).

127. See 35 U.S.C. 102 (1988).

128. This is contrary to the Supreme Court's statement that a patent may not be granted if the effect is to remove free access to information in the public domain. Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 6 (1966).

129. See 35 U.S.C. 102 (1988).

130. See Pierson v. Post, 3 Cai. R. 175 (N.Y. Sup. Ct. 1805).

131. See 35 U.S.C. 102(c) (1988).

132. See id. 102(g); International Glass Co. v. United States, 408 F.2d 395, 403 (Cl. Ct. 1969) (concealment of invention will result in loss of right to be granted a patent). See also Gillman v. Stern, 114 F.2d 28, 31 (2d Cir. 1940), cert. denied, 311 U.S. 718 (1941); Burke, supra note 73, at 473.