Chapter 5  
*Topics in the Economics of Property Law*

This chapter examines, in greater detail, issues associated with each of the four fundamental questions of property law introduced in the previous chapter.

I. What can be privately owned?  
A. Information economics  
   1. The problem of *nonappropriability*  
      The fact that information is usually costly to produce but cheap to transmit gives rise to the problem of nonappropriability, i.e., producers have problems selling information for more than a fraction of its value. As such, information has some of the characteristics of a public good—nonrivalry and nonexcludability. Thus, the standard theory holds that producers of information undersupply it because they are under-compensated for their efforts.

There are four ways this problem can be addressed:  
1) by having the state supply information directly or subsidizing the provision of information by private parties,  
2) through charitable contributions (social norms and the U.S. tax code),  
3) via “trade secrets” protection (e.g., non-disclosure agreements in employment contracts and the threat of a law suit if someone knowingly obtains information that was covered by a non-disclosure agreement), and  
4) by creating and protecting property rights in information.

B. Intellectual property: patents, copyrights and trademarks  
1. *Patents*: establish property rights to inventions and other technical improvements  
   a. *Breadth*: (broad versus narrow patents)  
      Here we are concerned with the social value of investment in research versus the social value of investment in development. We want to create the proper incentives for optimal investment in each activity.

      A *broad patent* is more likely to cover both pioneering research and developments from it.

      A *narrow patent* would only cover pioneering research or developments from it (two patents would be needed).

      The problem is that broad patents create incentives for duplicative research (research by competing parties), which ends up wasting resources.

      Narrower patents encourage slower, complementary research.

      However, if a narrow patent is granted for pioneering research that has little *stand-alone value* (i.e., market value) there will be insufficient incentives for this type of research (because the creator cannot appropriate any of the value from subsequent developments which do have stand-alone value).
A general rule to address this dilemma:
Patent protection should be broader for pioneering inventions with little stand-alone value and narrower for those with large stand-alone value. (Note that this is a non-issue in the case where transactions costs are sufficiently low by virtue of the Coase Theorem. Regardless of whether a narrow or broad patent is issued, bargaining could occur to reallocate the property right.)

b. **Duration**: Granting a patent creates a monopoly. Thus, a major issue is how long the patent should last because monopoly is economically inefficient. In the United States, patents last for a period of 20 years from the date of application. Holders of patents can license their use to others.

Is this necessarily efficient? To answer this question, we need to compare the MSB of patent protection, which consist of the value of increased investment in creative activity over time, to the MSC of patent protection, which consist of the increased costs due to monopoly over time.

c. **Conclusion**: The patent system is a response to the argument that, for various reasons, producers will undersupply information. However, there are various issues that warrant further consideration.
1. In some situations, the potential exists for producers to generate an amount of information that is efficient or in excess of the efficient amount: speculative investments, insider trading
2. Legal monopoly versus natural monopoly: network effects

2. **Copyright**: grants ownership rights to authors, artists, and composers.
   a. Only “original expressions” can be copyrighted, ideas cannot.
   b. Duration is currently limited to author’s life plus 70 years. Limiting the time period for copyrights substantially reduces *tracing costs*. 
3. **Trademarks**: establish ownership of distinctive marks or symbols. There is no economic justification for limiting the time period for trademarks because they encourage competition. The issue with trademarks concerns breadth, i.e., what should be considered a trademark versus a generic name?

C. Organizations as property: *Skip*

D. Public and private property: *Skip*

II. How are property rights established and verified?

A. Establishing property rights over fugitive property (objects with indefinite boundaries):
   First possession versus tied ownership: *Hammonds v. Central Kentucky Natural Gas Co.*

1. **Rule of first possession**: Whoever possesses the property in question owns it.
   
   a. The clear advantage of the rule of first possession is that it is easy to administer.
   
   b. The disadvantage of the rule of first possession is that it can lead to inefficiency by encouraging over-investment in acquiring property to the extent that investment is for the purpose of transferring existing wealth rather than creating new wealth, i.e., it is preemptive.

   *The inefficiency of preemptive investment*: People should improve property up to the point at which MC of improvement equals the marginal increase in *productive value*. The rule of first possession leads people to engage in investment activity up to the point where $MC = \text{marginal increase in productive value} + \text{marginal value of transferred ownership}$. 

   **Examples**: Copyrighting web addresses; Harvesting buffalo in the old west.

2. **Rule of tied ownership**: Ownership of the fugitive resource is “tied” to the ownership of some other resource for which property rights are well defined.
   
   a. The advantage of the rule of tied ownership is that it eliminates the incentive for preemptive investment so long as the ownership rights in the resource to which the fugitive property are tied are already established.
   
   b. The disadvantage of the rule of tied ownership is that in many cases it is difficult to establish and verify ownership claims. Thus, the rule of tied ownership can result in considerable transactions costs

   **Example**: Ownership of the fish in a stream, part of which runs through someone else’s property.
B. When to privatize open-access resources (e.g., common grazing areas, ocean fishing)
   1. Note that open-access, which is usually associated with the rule of first possession, results in overuse of a resource. This is a result of externalities associated with each individual’s use of the open-access resource.

   2. In contrast, the rule of tied ownership avoids overuse, but entails enforcement costs.

   3. Thus, resources should be privatized when the costs of privatization, e.g., boundary maintenance, are less than the costs resulting from overuse of the open-access resource. Note here that the benefits of privatization are the avoided costs of overuse.

4. Regulation as an alternative

C. Recording and transferring title: Verification costs versus registration costs: Skip this section

D. Can a thief give good title? Skip this section

E. Breaks in the chain of title: Skip this section

III. What may owners do with their property? Skip this section

IV. What are the remedies for the violation of property rights?
   A. Externalities and public bads
      An externality exists when some third party is affected (negatively or positively) by someone else’s actions.

      In the event that the exercise of one’s property right adversely affects someone else, a negative externality is said to exist. In such cases, it is reasonable and efficient to constrain the exercise of property rights. In the absence of such constraints, an inefficient quantity of the activity is produced.

      However, as we discuss next, we need to distinguish between private and public bads to identify the efficient solution.

   B. Remedies for externalities: Public versus private nuisances
      1. Private nuisances (private bads): In this case, by definition, transactions costs are relatively low. Hence, injunction is the preferred remedy on efficiency grounds because the property right should flow to the party that values it most highly.

      2. Public nuisances (public bads): In this case, transactions costs are high. Thus, awarding damages is preferred. However, we have to consider the tradeoff between temporary and permanent damages.

      Temporary damages only address past harms. In the event of additional harms in the future, the plaintiff must once again bring suit. This results in high transactions costs to the extent that damages continue to occur in the future and determining liability and the magnitude of damages is difficult.
In contrast, permanent damages avoid high transactions costs. However, because future damages are difficult to predict, error costs can be high. In addition, with permanent damages, there is no incentive to reduce harms in the future. Thus, there is a tradeoff between temporary and permanent damages.

We will adopt the following general guidelines:

- Temporary damages are preferred when damages are easily measured (relatively speaking) and innovation is rapid.
- Permanent damages are preferred when damages are relatively difficult to measure and innovation is slow.

C. Discuss *Boomer v. Atlantic Cement*