

# Infringement: Valuing IP For Damages

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*Analysis of actual market and market absent (infringement) royalty data economic factors used in estimating damages*

**T**his article focuses on the key economic factors that should be considered when estimating damages in patent matters. I show that the same factors that influence the value of the underlying intellectual property also affect patent damages. The next section describes the legal and economic framework for calculating patent damages. The following two sections discuss the construction of a lost profits claim and the determination of a reasonable royalty. The concluding section summarizes the key economic principles.

## THE LEGAL AND ECONOMIC FRAMEWORK

The Federal Circuit defines compensatory damages as lost profits caused by the infringement. Lost profits include profits on lost sales as well as profits lost as a result of price reasons. Such a comprehensive definition is designed, as Judge Easterbrook put it, "...to give the patent holder the economic benefits it would have enjoyed had its intellectual property been respected."<sup>1</sup> When lost profits cannot be proved, a reasonable royalty serves as a floor on damages.

A patent is often believed to convey a monopoly on the patent holder. In fact, however, a patent only gives the patent holder the right to exclude others from using the patented invention, just as property rights for intangible property enable the property owner to exclude others from using his or her

property.<sup>2</sup> The value of a patent, therefore, depends on the same factors that determine the value of tangible property — its inherent usefulness and the extent and price of substitutes.

Properly determining patent damages requires an economic analysis of supply and demand conditions that relate to the value of the intellectual property itself. It is not a simple accounting exercise, but rather a market must be defined and reconstructed about the alleged infringement (or about the potential invention in the case of valuing intellectual property itself). Such a market analysis includes assessing the degree of competitors and potential substitutes, determining the demand elasticity of the product at issue and analyzing the manufacturing, marketing and distribution capabilities and costs of the market participants.

In the next two sections I show how the underlying economic value of the intellectual property at issue affects lost profits and reasonable royalty damages.

## THE VALUE OF A PATENT

Below, I show how the value of a patent depends on the demand for the patented product, the extent of substitutes, the ability to exploit the demand, and profitability.

### *Demand for the Patented Product*

Unless there is some demand for the patented feature of a product, the patent has no value and there are no lost-profits damages. To assess the demand for the patented feature of the product, one must ask what the invention accomplishes and how users value the accom-

plishment. For example, does the patent improve the product, allow the product to be produced at a lower cost or make possible the production of a new product altogether?

### *Absence of Acceptable Noninfringing Substitutes*

Economic teaches that the value of a patented product is determined to a large extent by the availability and cost of substitute products and production technologies. Thus, an evaluation of the degree of substitution on both the demand and supply sides is necessary.

On the demand side one must look to what substitute products, if any, the purchasers of the product at issue would turn to if its price were higher or it were unavailable. If a new patented product has many substitutes in the marketplace, the invention will have little value. For example, suppose a new way of lighting is invented but offers neither cost advantages nor instant methods of lighting nor any different esthetic benefits to consumers. The fact that there are many competing lighting products implies that such a patent has little or no value. Should the patent holder try to license the patent, it would find no takers. Consumers would be unwilling to pay a premium for the patented product (and therefore manufacturers would be unwilling to pay a royalty). Likewise, there would be no lost sales or profits resulting from

\* See *Value Pricing: One's Economic Value System* Co., 194 P. Supp. 122 (S.D. Cal. 1955).

<sup>2</sup> *Grain Processing* case recently, and the patent holder the right to manufacture in violation thereof in the patent case the invention may require the use of other patents.

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