

# Econ **INSIDE** One

ECONOMIC THEORIES IN PRACTICE / FALL 2003

## PATENT DAMAGES AND PRICE EROSION

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Recent decisions in the Court of Appeals for the Federal Circuit have heightened awareness of the need for careful economic analysis of patent infringement damages. While these decisions relate to the analysis of all components of patent damages (e.g., reasonable royalties, lost profits and a range of other direct or indirect harm), price erosion is a possible source of damage that requires especially careful analysis.

### **Fundamentals of Lost Profits Damages •**

The “but-for” principle is the economic approach to measuring damages. This principle (and thus economic analysis) has received increased acceptance in recent legal opinions such as *BIC Leisure Products*, *In re Mahurkar Patent Litigation*, and *Grain Processing*. The appropriate question for an economic expert is: “But for the infringement, what would have occurred in the market and how was the plaintiff harmed relative to that but-for world?”

An analysis of damages is only as good as the expert’s understanding or assumptions regarding the but-for market conditions. Infringement damages result from a reduction of the plaintiff’s market power and sales as a result of increased competition from the defendant’s infringing product. In each circumstance the effect lays at or between two extremes: at one extreme, without the infringed technology, the defendant would have been out of the market; at the other, the role of the allegedly infringed technology was inconsequential.

### **How Price Effects May Damage a Plaintiff •**

Typically, lost profits must come through one or more of these avenues: the number of units sold, production costs and the selling price.

The simplest approach would be to focus on the first avenue and credit the plaintiff for the sales “stolen” by the defendant. If conditions are just so (i.e., the infringement did not expand the market, buyers would have turned to the plaintiff for products and the plaintiff’s unit costs did not change) the appropriate analysis may result in a relatively simple one-for-one attribution of the defendant’s sales to the plaintiff.

However, the strengthened competition due to infringement often results in lower prices to the plaintiff. Thus the plaintiff may suffer lost profits on sales he did not lose to the defendant as well as on those he did. This price erosion can occur as a response to lower prices from the infringer or because infringement has increased the attractiveness of the defendant’s product relative to the plaintiff’s. Thus, understanding price erosion is crucial to determining the appropriate level of damages.

The law of demand calls for especially careful analysis to evaluate potential price erosion. When prices are reduced, the law of demand tells us that sales were not merely reallocated among sellers because of the infringer’s product. Rather, sales likely increased. Along with the amount of price erosion, the economic expert also must

## PRICE EROSION - CONTINUED

determine the extent to which sales were made only because of the lower prices. Incremental units sold due to price erosion should not be treated as lost sales and profits for the plaintiff. Only careful quantitative analysis of market demand and supply can measure this effect.

**When is Price Erosion Likely to be Significant and When is it Not?** • Price erosion is most likely to be important in markets where, during the infringement, demand was elastic (i.e., multiple

firms produced products that buyers regarded as good substitutes and the buyers were relatively willing and able to switch). This ability to substitute may have been caused by the infringement but that is not what makes the price erosion more substantial. Elastic demand leads sellers to compete away their profits through lower prices. In this case, however, they are competing away the profits designed to reward the plaintiff's innovation. Such illegitimate competition could result in substantial damages from price erosion.