Intellectual Property Infringement and Assessment of Damages



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Protection of intellectual property ("IP") is critical to promoting innovation. Unless IP is protected, businesses and individuals do not reap the full benefits of their ideas and inventions and have little or no incentive to focus on research and development. In this sense, piracy, counterfeiting and other forms of IP infringement pose a serious threat not just to IP based businesses but also to the culture of innovation.

So, what is IP infringement? IP infringement refers to any violation or breach of protected intellectual property rights. It can range from piracy, unauthorized use, copy, reproduction, or distribution of IP to counterfeiting, which involves producing replicas of genuine goods with the intent to

mislead the customer.

Indian law recognizes the importance of IP protection and provides for various remedies, including an award of costs and damages. But how does one measure the damage caused by an IP infringement?

Generally speaking, the value of any asset (including IP) is arrived at based on an estimate of its potential future benefits. In contrast, the estimation of damages is typically more retrospective than prospective in nature. The different types of damages that can arise from IP infringement include claimant's lost profits, respondent's profit and unjust enrichment, reasonable royalty and statutory damages. In this article, we will focus on lost profits.

Lost profits are typically claimed when the harm is for a finite period and is related to a separately identifiable cash flow. It represents the difference between profits the plaintiff actually attained and profits the plaintiff would have attained, "but for" the harmful event. While this sounds straightforward, the challenge comes in estimating the "but for" scenario, i.e., coming up with a reasonable and supportable estimate of the profits the plaintiff would have generated in the hypothetical scenario where the IP infringement had not occurred.

There are some methodologies that can help one put together a supportable estimate:

- Before and after analysis here one compares the plaintiff's performance before the IP infringement to the plaintiff's performance after that event or action. The decline in performance can provide a good indicator of the damage suffered by the plaintiff. However, this approach does not account for the growth in profit that the plaintiff might naturally have achieved if the infringement had not happened.
- Yardstick method This method uses a benchmark or a "yardstick" to estimate what the revenues and profits of the affected business would have been. Examples of yardstick include industry averages and financial performances of similar, unaffected divisions.
- Terms of underlying contract In some instances, it may be possible to use the specific terms of the contract that detail the financial arrangements (e.g., specified royalty rate on sales of a product or revenue and profit targets under and agreed business plan).
- Disgorgement This method, though difficult to apply due to lack of information, considers the actual profits generated by the defendant through breach of the plaintiff's IP.

Measurement of lost profits

The measurement of lost profit damages can be based on a combination of components, such as:

- Lost unit sales
- Lower unit sales prices
- Higher costs (such as increased production and/or marketing costs)
- Lost sales on ancillary (convoyed) products that are typically sold with the infringed product
- Extra expenses

The starting point in the estimation of lost profits is the measurement of revenues. This refers to additional revenues that would have been generated by the plaintiff but for the actions of the defendants. The key issues relevant to measuring revenue on lost sales are as follows:

- Damage period The damage period may begin at the onset of infringement of existing intellectual property. In the case of patent disputes in which the patent owner's products are marked as patented, the damage period begins when the infringing product is made, sold, imported, or offered for sale. Conversely, if the patent owner's products are not marked as patented, the damage period begins only when the infringer receives actual notice of infringement and has made, sold, imported, or offered for sale an infringing product. The damage period typically ends on the date of trial because an injunction ordinarily will be issued if the infringer loses its case. However, certain types of infringement may inherently continue beyond the trial date.
- Plaintiff's pre-infringement sales price Damages are often calculated based on the intellectual property
 owner's pre-infringement (actual) sales prices. The courts require documentation from the intellectual
 property owner to justify the method or basis for estimating these prices. The product's pricing history may
 be examined to determine the historical rate of price increases or decreases. Additionally, it may be
 appropriate to compare the historical rate of price increases to the historical inflation rate so that the impact
 of inflation is removed. The plaintiff's pricing models for quantity and early pay discounts may also be
 relevant.
- Price erosion A claim for price erosion may exist if (1) the patent holder is not able to increase prices as much as he or she would have absent the infringement, or (2) the patent holder is forced to decrease price in the face of the competition due to the infringer's conduct. A careful analysis of the industry in which the infringed and infringing products operate is often central to assessing a potential price erosion claim. If the patent holder claims it could have charged higher prices but for the infringement, the patent holder must show the impact of such higher prices on the units demanded in the marketplace.

Some considerations in the calculation of Price Erosion are as follows:

- Price Elasticity The price elasticity of supply and demand is often central to the calculation of damages based on alleged price erosion. The price elasticity of demand measures the sensitivity of the quantity demanded to price changes of the product.
- Market Analysis of Infringing Product An examination of the market that the plaintiff's product serves is required to assess the merits of a price erosion claim. The number of competitors in a given market influences the prices established in that market, with price erosion easier to measure in two-supplier markets than in multi-supplier markets. The intellectual property owner also cannot assume that the infringer would be absent from the market absent the infringement, especially if the infringer sells multiple products, only one of which infringes. In a market with many competing products, price is much less influenced by the actions of a single competitor; rather, the entire market acts to set the price.
- Substitutes and New Product Entrants Substitutes that limit the potential returns of an industry by placing
 a ceiling on the prices that firms in that industry can profitably charge can diminish or invalidate a price
 erosion claim. New entrants to an industry bring new capacity, the desire to gain market share and often
 substantial resources. As a result, prices can decline or incumbents' costs can rise, reducing profitability.
 The likelihood of new entrants into an industry which may influence the price for an infringed product should
 be considered in assessing potential price erosion. Conversely, barriers to entry into an industry or a market
 may simplify an argument for price erosion.
- Power of Suppliers and Buyers Suppliers and buyers may influence the price of an infringed product. The
 lower price may have come from buyer power, not additional competition. Similarly, the power of suppliers
 in the creation of the infringed product should be examined. The switching costs of the buyer should also
 be considered. If the buyer's costs of switching from the patented technology to a different technology are
 significant, the intellectual property holder may have a captive market and prices could be substantially
 increased without affecting demand.

Additional considerations

Entire Market Value Rule - This rule allows for the recovery of damages based on the value of an entire
apparatus containing several features, even though only one feature is covered by the intellectual propertyin-suit. The entire market value rule ordinarily applies when the non-patented and patented components are
physically part of the same product.

The entire market value rule has been applied to both lost profits and a reasonable royalty, as well as to patent and other types of intellectual property disputes. The rule recognizes that, in some cases, the economic value of intellectual property may be greater than the value of the sales of the covered part alone.

Convoyed or Collateral Sales - Convoyed sales generally include sales of products not covered by the
intellectual property in suit but that are caused by the sale or use of that intellectual property. Convoyed sales
are of items that are not typically a physical part of the original device, but which are sold as a result of the
sale of the patented item.

The intellectual property holder may recover damages for convoyed sales if the intellectual property owner can prove that it would have made those sales "but for" the infringement. Further, there should be a reasonable probability that the sale of the patented item would have caused the sale of the non-patented accessory.

• Assessment of increased costs - Incremental costs may include increased general and administrative costs or other non-direct product related costs. Increasing these types of costs would lower the profits on the infringing units, as well as the related damages. A careful examination of costs is essential to determining the profitability of the lost sales. This effort often involves reviewing the costs reflected within detailed financial statements, standard accounting records, and other financial documents. In lieu of a determination by line item, a statistical analysis of the relationship between cost and volume may provide the required cost estimates. Such analysis can identify, on average, how much costs have in fact increased for each unit increase in sales volume.

One of the initial determinations for each cost item is whether the cost is variable or fixed over the range of actual and anticipated incremental production. A comparison of the intellectual property owner's output to the claimed incremental sales can help determine the amount of incremental costs that would need to be incurred to make the incremental sales.

To measure the incremental costs associated with the increased units sold, the courts have typically adopted two approaches, namely, account analysis and regression analysis.

Account analysis involves examining accounts at the general ledger level and determining whether that cost is fixed or variable. Regression analysis is a statistical technique for determining the relationship between two variables and is applied to cost and volume data.

What if lost profit cannot be proven?

In the event lost profit damages cannot be proven for all the alleged infringing sales, then the patent owner may be entitled to other remedies and other methods to estimate damages. However, a discussion of those remedies and methods requires a detailed explanation, which is beyond the scope of this article.