ACCOUNTING OF PROFITS IN INTELLECTUAL PROPERTY CASES IN CANADA

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INTRODUCTION

An accounting of profits is a monetary remedy measured by the profits made by the defendant. An accounting of profits is available in Canada for copyright, patent, and trade-mark infringement.[1]

Since 1982, an accounting of profits has been the dominant monetary remedy for patent infringement in Canada and the Commonwealth.[2] This article is an updated version of an article published in 2001 that reviewed Canadian law respecting this remedy as it was then understood. The 2001 article noted that "if [accounting of profits] is to be kept as a frequently used remedy, the economic and accounting bases on which it is founded need clarification by the judiciary."[3]

Since then, the Supreme Court of Canada in *Monsanto Canada Inc. v. Schmeiser* addressed the remedy,[4] adopting a new approach, the Differential Profits approach (defined and discussed below). The result under this new approach is clearly different from the results of the past 20 years, which were based on the logic set out in the 1982 *Teledyne* decision.[5]

It is settled law that in an accounting "the inventor is only entitled to that portion of the infringer's profit which is causally attributable to the invention."[6] The debate is about the definition of the infringer's profits. The understanding of "profit" that has prevailed since the 1982 *Teledyne* decision is the difference between revenues and costs:[7]

> "Profit" [is] the difference between expenditures made to produce and sell the infringing articles and the receipts therefrom.[8]

We call these "Actual Profits" rather than "accounting profits" to avoid confusion with the term "accounting of profits" and we call this method, the one advanced by *Teledyne*, the Actual Profits approach.

In the 2004 *Schmeiser* case, one of the Supreme Court's key holdings was on the "preferred means of calculating those profits." The approach adopted by the court was very different from the Actual Profits approach. It set out a differential profit or comparative approach:[9]

> A comparison is to be made between the defendant's profit attributable to the invention and his profit had he used the best non-infringing option.[10]

We call this the Differential Profits approach.[11]

The practical significance of the two approaches is shown in *Schmeiser*. The defendant infringed Monsanto's patent by growing genetically modified canola (which rendered it resistant to Roundup herbicide). However, the defendant claimed that he had gained no financial benefit from the use of the invention; there was no evidence to show that he took advantage of the herbicide resistance by spraying with Roundup and, because he sold the canola seeds for crushing rather than as seed, the sale price was no higher than it would have been had he planted unpatented seed.[12]

The trial judge applied the Actual Profits approach, stating, "It is the profit from sale of that crop that plaintiffs may claim, not the difference between sale of that crop and sale of an alternative crop that was not grown,"[13] and held the defendant liable to account for profits of almost $20,000. In contrast, the Supreme Court applied the Differential Profits approach and found that the defendant's profits "were precisely what they would have been had they planted and harvested ordinary canola. … The appellants' profits arose solely from qualities of their crop that cannot be attributed to the invention."[14] Hence, there was no difference between the defendant's profits with and without the infringement. The Supreme Court held that no profits at all were to be awarded.

One of the authors of this article has previously argued that the Differential Profits approach is a necessary result of the fundamental concepts of causation, a confirmation in the patent context of well-established principles from general tort law.[15] Subsequent to the *Schmeiser* decision, some others have argued that because the Supreme Court did not reject or address the Actual Profits approach apart from the facts of the case before it, either the Actual Profits or the Differential Profits approach may be used depending on the equities of the case.[16] On this view, the Differential Profits approach is not a rule of law that must be followed by trial courts, but is merely one more option available to the trial courts in devising the best monetary remedies in the circumstances before them.[17]

This article does not attempt to resolve this question. Rather, it explains, compares, and contrasts the Differential Profits approach and the Actual Profits approach and discusses their links to causation in the general law of tort. It is important to recognize that while the result in *Schmeiser* is dramatic, and the Differential Profits approach is a major conceptual departure from the Actual Profits approach, the Differential Profits approach does not require wholesale rejection of prior case law. On the contrary, as we discuss in more detail below, the Differential Profits approach very often confirms the awards of prior cases—as in *Teledyne* itself[18]—depending on the proven facts, arguments before the court, and the way in which costs are defined. Though conceptually distinct, the Differential Profits and Actual Profits approaches often converge in practice.

This article is organized into the following sections:

Section 1 discusses the accounting of profits remedy at a high level, contrasting the Actual and Differential Profit approaches. Notably, it discusses the "but for" position under the Differential Profits approach, as well as the concept of taking the defendant as you find him.

Section 2 considers the types of revenues that may be captured in an accounting.

Section 3 discusses the types of costs that may be deducted from the revenues to determine profits.

Section 4 investigates when an apportionment of profits between profits attributable to the invention and profits attributable to other factors is appropriate.

Section 5 discusses the entitlement of the plaintiff to the accounting of profits remedy, including the difficulty of its administration.

Section 6 briefly introduces punitive or exemplary damages and their interplay with the accounting remedy.

In sections 2, 3, and 4 we examine both how these issues have been treated under the Actual Profits approach and how they might differ under a Differential Profits approach.

1.0 ACTUAL PROFITS AND DIFFERENTIAL PROFITS

1.1 Take the Infringer as You Find Him

This section explores the principles of the Actual Profits and Differential Profits approaches, and in particular the differences between them. As a preliminary point, we should note that one principle is fundamental to both approaches—namely, the principle that a plaintiff must "take the infringer as you find him." As stated by Laddie J. in the British case *Celanese*, when assessing the profits made by the defendant, "One of the weaknesses … from a plaintiff's view is that it is necessary to take the defendant as he is."[19] Even if the defendant, perhaps because of poor business decisions, reaps much less advantage than it reasonably should have done via the infringement, the plaintiff cannot claim revenues, costs, or profits other than those actually made.[20] As stated by the Australian High Court:

> [T]he plaintiff must take the business of the infringer as it is, as Learned Hand J. pointed out in *Sheldon*. The plaintiff is confined to the profits actually made. It is irrelevant that the defendants could have used their resources in a more efficient way and generated a higher profit.[21]

1.2 The Actual Profits Approach

The Actual Profits approach attempts to find the revenue made through the infringement and deduct the associated costs to determine the amount to be disgorged. The court is attempting to make a factual determination. It does not attempt to construct a hypothetical position.

Nine pre-*Schmeiser* patent cases, all heard in the Federal Court, calculated an accounting of profits award.[22] From this case law, three basic issues arose: what types of revenues may be attributable to the invention; what costs may be deducted from the revenues to determine profits; and when is it appropriate to apportion the revenues and costs between infringing and non-infringing sources and how to do so. In sections 2, 3, and 4 we will go through these three issues, explaining how they have been treated under the Actual Profits approach and analyzing how the treatment might change under a Differential Profits approach.

The plaintiff bears the burden of proof for establishing the gross revenues the defendant received, and the defendant will be required to reveal them on examination. The burden then shifts to the defendant to prove all deductions from this amount, both costs and apportionment.[23]

1.3 Differential Profits Approach and the "But For" Position

Although the Supreme Court in *Schmeiser* cited only one prior case as direct authority for the Differential Profits approach,[24] it adopted a value-based differential approach to causation "consistent with the general law on awarding non-punitive remedies"[25] and consistent with the basic rule for causation of damages set out by the Supreme Court in 1996 in *Athey v. Leonati*:

> The essential purpose and most basic principle of tort law is that the plaintiff must be placed in the position he or she would have been in absent the defendant's negligence (the "original position"). However, the plaintiff is not to be placed in a position better than his or her original one. It is therefore necessary not only to determine the plaintiff's position after the tort but also to assess what the "original position" would have been. *It is the difference between these positions, the "original position" and the "injured position," which is the plaintiff's loss*.[26]

Both *Schmeiser* and *Athey* apply an approach to causation in which the actual state of affairs is compared with a hypothetical position as if the defendant had not infringed. *Athey* affirms the well-established rule in damages that the hypothetical "original position" is the position the plaintiff would have been in *but for* the tort, assessed on the balance of probabilities.[27] For this reason the approach is commonly referred to as the "but for" test for causation.[28] The "but for" test, as in damages, underlies the Differential Profits approach but is applied to the profits of the defendant. Put another way, the Differential Profits approach compares the actual with the "but for" profits, which are very different from the actual profits of the infringing business activity

An award under the Differential Profits approach may be larger or smaller than that calculated under the Actual Profits approach. In almost all cases, however, the Differential Profits approach produces less profit to be disgorged than the Actual Profits approach. This is because the Differential Profits method is a comprehensive economic comparison whereas the Actual Profits method requires a comprehensive and careful articulation of both accounting and economic costs to produce the same result. Note that, even if both the actual and the "but for" positions show a loss under the Differential Profits approach, the difference may be positive.[29]

The "Best" Non-Infringing Option?

In *Schmeiser*, the court stated that the profits computation should be made by a comparison between the actual profit and the defendant's hypothetical profit had it used the "best" non-infringing option.[30]

There is a potential conflict between the "but for" and "best" hypothetical profits. The defendant's most likely alternative course of action (the "but for" alternative) is not necessarily its best course of action (the "best" alternative). The "but for" hypothetical scenario could fall short of the "best" alternative because of, for example, the poor business practices of the defendant.

This potential conflict may be resolved by arguing that prior tort case law holds that the "best" non-infringing option is not the best in any universal sense; instead, the most likely or "but for" course of action was generally the best option that was open to the public and actually known and available to the defendant.[31]

The Supreme Court of Canada in *Collette v. Lasnier* noted that the proper comparison was with "the latest precedent and best known mode."[32] The potential conflict between the "but for" and "best" hypothetical profits may be further tempered by presuming that the defendant would have chosen the most beneficial known non-infringing method consistent with the resources, culture, capacity, and strategic plans of the defendant—that is, consistent with the operating reality of the defendant. This is also essentially the same as the rule in contract law.[33]

It is illusory to speak of a static "but for" position. The "but for" position should be a holistic real-world simulation reflecting all the dynamic interactions and complexity of world markets. Consequently, only well-thought-out models and related assumptions as to what the behaviour of the defendant would have been had it not infringed can simulate the notional original or "but for" result. Only thoughtful financial analysis will capture the actual result, however it is defined.

Care is needed in using hindsight to construct the "but for" comparative model. Since the question is what the defendant would have chosen to do, only the information available to the defendant at the time of the decision should be considered in determining what decision would have been made. The defendant cannot argue that it would have adopted a course of action that hindsight shows would have been most advantageous, if all considerations known at the time pointed in another direction. Although the *decisions* the defendant would have taken but for the infringement should be assessed *without* the benefit of hindsight, the likely *consequences* of those decisions should be assessed *with* the full benefit of hindsight.[34] For example, in the American *The Cawood Patent* case,[35] the defendant had infringed the plaintiff's patent for an improved machine for repairing the crushed ends of railroad rails. Subsequent experience showed that repairing the crushed ends was unprofitable, even using the patented method. However, at the time of the infringement, repair was thought to be profitable. Thus, the defendant's *most likely* non-infringing course of action would have been to repair the crushed rail ends by a more expensive non-infringing method, and this is the relevant modality; the defendant's best non-infringing course of action would have been to not repair at all, but this could only have been known with hindsight and it is not relevant. Consistent with *Athey v. Leonati*, the U.S. Supreme Court held that the correct comparison was with the course of action that would most probably have been followed by the defendant consistent with its operating reality—repairing the crushed ends.

Following the Actual Profits case law, it seems likely that the same burden of proof would apply for the actual position: the plaintiff has to prove the gross revenues, and the defendant has to prove all deductions. There is no Canadian case law concerning the hypothetical position in the accounting context. Since the information required to construct the hypothetical position is in the defendant's hands, perhaps it is reasonable to place the burden of proving the hypothetical position, both revenues and costs, on the defendant. However, there is U.S. case law that requires the patentee to provide a comparison based on some acceptable alternative, often the method used by the infringer before adopting the patented method. Once this is done, the burden shifts to the infringer if it wishes to prove that there was some better non-infringing method actually available to it.[36] This is an essential point because many past cases in which the entire profits are ordered in an accounting turn on the failure of the infringer to adduce relevant evidence.[37]

Perhaps there should be a rebuttable presumption that a defendant will adopt the best open and available mode of operation in the alternative to infringement. A rebuttal based on the operating reality of the defendant should be available to both the plaintiff and defendant.[38]

Notwithstanding the comments above, even under a liberal application of the "take the infringer as you find him" rule, it seems that the most likely alternative (MLA) course of action will often be the best alternative. This course of action is thus often called the "next best alternative."

The most likely alternative is properly considered an opportunity cost. The concept of "opportunity cost" is based on the definition of "economic profits." Economists are concerned with whether assets are being used in an efficient and optimal manner. They examine the "economic profit" of an asset—the incremental benefit from using the asset in a particular way as opposed to the most likely alternative use. Economic profit is the same as the opportunity cost. Opportunity cost is defined as "the value of the alternative forgone by adopting a particular strategy or employing resources in a specific manner … the greatest net benefit lost by taking an alternative."[39]

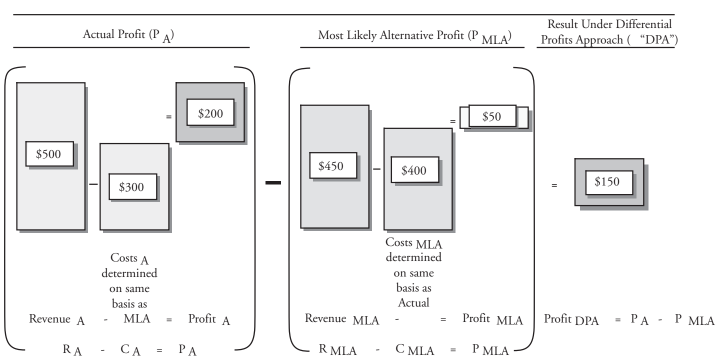
Figures 1 and 2 explain the "but for" or Differential Profits approach as conceptualized by *Schmeiser*. The Differential Profits approach is denoted by DPA. Subscript A refers to actual; subscript MLA refers to most likely alternative; capital R equals revenue; capital C equals cost; capital P equals profit:

Actual Profit (P_A) – Most Likely Alternative Profit (P_{MLA})

= Profit to be disgorged (P_{DPA})

$200 – $50 = $150

Figure 1 The Differential Profits Approach



We call this computational method (illustrated in figure 1) the "direct mechanic" because one actually computes both the actual and the most likely alternative or original position and compares the results.

One can see that in application of the direct mechanic, both actual revenue and actual costs as experienced by the defendant must be determined in order to determine the actual profit (Profit $_A$):

$$\text{Profit}_A = R_A - C_A = \$500 - \$300 = \$200$$

Similarly, one can see that both notional revenue and costs need to be computed when determining the most likely alternative:

$$P_{MLA} = R_{MLA} - C_{MLA} = \$450 - \$400 = \$50$$

When determining actual profit and comparing it with the most likely alternative, the costs under both computations must be computed consistently for the results to be meaningful.[40]

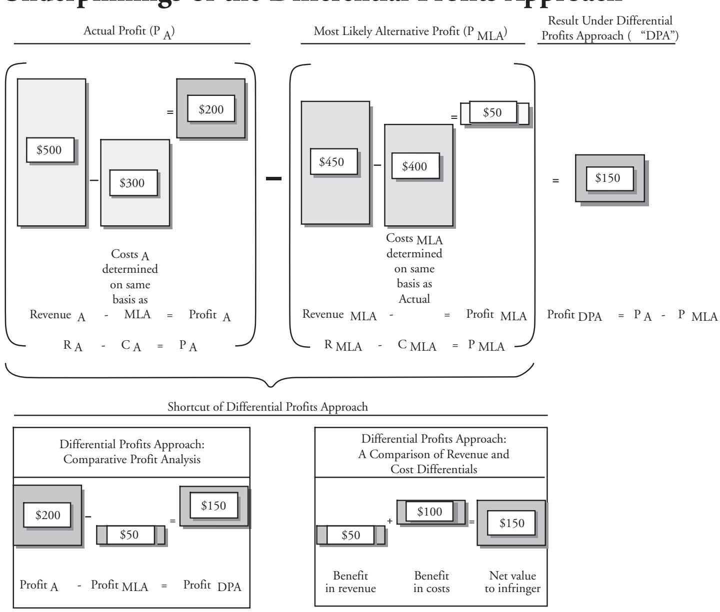
Alternatively, a cost-based differential approach can be used to compute the differential profits. However, care needs to be taken: such shortcut methods can conceal the actual revenue and costs as well as those under the most likely alternative, generating misleading results. The cost-based differential approach is described here and illustrated in figure 2:

$$P_A - P_{MLA} = P_{DPA}$$

or

$$(R_A - R_{MLA}) + (C_{MLA} - C_A) = P_{DPA}$$

Figure 2 Underpinnings of the Differential Profits Approach



2.0 REVENUES

In general, the plaintiff has the burden of proving the revenues gained by the defendant through the infringement, although the defendant will be expected to provide documentary evidence of the revenues received.[41] In the nine pre-*Schmeiser* patent accounting of profit cases that went through to an assessment of the award, the basic quantum of revenues received was described by the referee as "agreed to" by the parties.[42]

Contention has arisen over whether certain classes of revenues arise from the infringement and should be included in an accounting of profits award:

- revenue from the sale of convoyed products
- revenue realized through the actions of third parties (other than customers)
- revenue achieved in foreign countries
- revenue achieved by wholly owned (100 percent) subsidiaries
- revenue achieved by less than 100 percent owned subsidiaries, including minority interests ("investees")
- earned but unrealized revenues
- future sales and goodwill
- springboard sales.

The theoretical treatment of these revenues is slightly different under the Actual Profits and Differential Profits approaches—the above-noted revenues are more contentious under the Actual Profits approach (although clashes over the scope of discovery can occur under either approach). Under the Actual Profits approach, it is a difficult question of fact whether these revenues result from the defendant's infringement and should be included. Under the Differential Profits approach, the contentiousness in large part disappears as a matter of law. Such revenues must be included in both the actual and but for positions, and if they are, it is purely a question of fact as to whether the revenues would have been generated but for the infringement.

It is an open question whether there are remoteness limits on accounting of profits—that is, whether there are revenues that would logically be included, but are excluded for a reason of public or social policy.[43] Recent case law has focused on removing remoteness concerns based on an ill-defined fear of "extending the monopoly of the patent"; however, more solid remoteness grounds may yet be encountered.[44]

In general, case law supports the inclusion of all of these revenues on appropriate facts. As noted, inclusion of these revenues is consistent with the Differential Profits as well as the Actual Profits approaches.

2.1 The Sale of Convoyed Products

Convoyed products are products sold in conjunction with infringing products. For example, a patented product may be sold at a modest price, but significant profit may be generated by a service contract or subsequent sale of supplies.

The question of the inclusion of convoyed product sales in profits arose in *Beloit v. Valmet OY*.[45] In *Beloit*, the defendant included an infringing press section in four sales of paper-making machines. The amount of profits from various activities was agreed to by the parties, but the parties disagreed over whether profits from the sale of spare and auxiliary equipment should be included in the award. At the reference, Rouleau J. found that since there was evidence that the paper-making machines would have been sold without the infringement, the sales of spares would have occurred in any case and so should not be considered to be part of the profits from the infringement. The Federal Court of Appeal upheld Rouleau J.'s decision with respect to the sale of spare and auxiliary parts. However, Hugessen J.A. emphasized that

> [i]n our 1992 decision, we had made it plain that, in our view, it was a question of fact whether profits arising from "the after sale provision of parts and services" resulted from the defendant's infringement.[46]

The Canadian position is consistent with the Australian High Court decision in *Dart Industries v. Decor*.[47] This is also consistent with damages, where a plaintiff may recover lost profits on prospective convoyed products.[48]

2.2 Revenue Realized Through the Actions of Third Parties (Other Than Customers)

In *Beloit* there was also a dispute as to whether profits from Finnish government subsidies should be included in the award. The Federal Court of Appeal overruled Rouleau J.'s rejection of foreign government subsidies as part of the award. In the court's view, these were indirect profits flowing from the sale of the infringing press sections, and should be included in the award. Furthermore, Hugessen J.A. said:

> I can see no merit in the defendant's argument that because the alleged benefits flowed to it from third parties rather than from its customers, they should not be taken into account. [The subsidies] in question were directly tied to the sales of the infringing press sections and served to reduce the defendant's costs and/or increase its profits.[49]

This logic implies that the analysis of profits gained through third-party actions should be considered in determination of an accounting of profits in Canada. Such profits might include "subsidies," research grants or tax credits from the Canadian or provincial governments, or access to inexpensive laboratory or office space provided by university or private sector incubators.

2.3 Profits Made in Foreign Jurisdictions

As discussed above, the Federal Court of Appeal in *Beloit* included subsidies paid by the Finnish government as profits due to infringement. From this analysis, it seems that profits made in foreign jurisdictions from an infringement of a patent in Canada would be caught in an accounting of profits. This also appears to be the rule in the United States.[50] It is worth emphasizing that this rule applies only if there is an infringement *in Canada*.

2.4 Profits Achieved by Wholly Owned Subsidiaries

Beloit also proceeded with an action against Valmet-Dominion, a subsidiary of Valmet OY, for infringement of the same patent. The Federal Court of Appeal in an earlier ruling related to discovery stated that

> [p]rofits realized by the defendants through subsidiaries or related companies, including but not limited to any royalties paid to the defendant by the latter, must be accounted for. The fact that a subsidiary has also been sued has no bearing on the matter. The theoretical danger of the plaintiff recovering the same profits twice can be dealt with, if necessary, at a later stage.[51]

This is also consistent with the U.S. approach.[52]

Selling as well as manufacturing a patented item are both infringements, and there is no reason a patent holder cannot recover a remedy from both a manufacturer and retailer or distributor of an infringing item.[53] However, the plaintiff should not expect to recover more than the appropriate amount in aggregate.

2.5 Profits of Less Than a 100 Percent Owned Entity

Suppose that an infringement provided additional profits for a company in which the infringer held less than a 100 percent interest—or, more dramatically, less than a controlling interest. Can a portion of those profits be included in the accounting of profits against the infringer?

One can start by assuming that the appropriate percentage of the investee's profits under consideration is equal to the defendant investor's percentage holding. But it is a complex question to determine whether to vary this percentage. It is a function of many factors including the rights of the defendant investor under the shareholder's agreement, if any.

To our knowledge, there is no case law on this point. A deep analysis of this point is beyond the scope of this article. Perhaps guidance could be found by looking at the tracing of assets subject to constructive trusts.

We believe the key question is the liquidity or accessibility of the investee's profits to the defendant investor (which is not the liquidity of the investee's profits to the investee per se). For example, if the defendant investor held 85 percent and outright control, perhaps 85 percent of the investee's profits would be disgorgable because the defendant investor has effective control of them.

2.6 Earned But Unrealized Profits

Cases in British and Australian jurisdictions have suggested that it may be appropriate to add earned but unrealized profits to an accounting award. This is a simple extension of the generally accepted accrual accounting principle of accruing income and costs when earned or incurred as opposed to when paid. In the case of *Potton Ltd. v. Yorkclose Ltd.*, the defendants were liable for infringing the copyright of the plaintiffs' house designs. The plaintiffs requested that they be awarded unrealized profits from built but undelivered houses. Millett J. held, in obiter dicta, that the plaintiffs were entitled to unrealized profits:

> Unrealised profits are actual profits. Profits are made when they are earned, recognised when they are brought into accounts, and realised when they accrue, that is to say when a legal right arises to receive payment. As a matter of ordinary accounting practice, profits are seldom recognised before they accrue, but that is a matter of prudence only; in a proper case they may be recognised before they accrue. Whether or not recognised, however, they are not profits which could or should have been made or which are merely capable of being made, but profits which have been actually made though not yet realised. …
>
> The making of a real though unrealised profit by the unauthorised use of another's intellectual property is plainly an advantage which is capable of resulting in unjust enrichment. … The reason why this question appears not to have arisen for decision before is that where goods or papers are produced in infringement of copyright the plaintiff is entitled to conversion damages and delivery up of unsold copies. … Unless the plaintiff is entitled to an account of unrealised profits he may have no substantial remedy despite the enrichment of the defendant as a result of his wrongful use of the plaintiff's property.[54]

2.7 Future Profits and Goodwill

Damages encompass a loss of profits on future sales that, but for the infringement, would have been made after the date of the trial. The profits from these future sales flowing from the infringement should also be disgorged in an accounting of profits. This is consistent with the general law of damages, as stated by the Supreme Court in *Athey*:

> Hypothetical events … or future events need not be proven on a balance of probabilities. Instead, they are simply given weight according to their relative likelihood. For example, if there is a 30 percent chance that the plaintiff's injuries will worsen, then the damage award may be increased by 30 percent of the anticipated extra damages to reflect that risk. A future or hypothetical possibility will be taken into consideration as long as it is a real and substantial possibility and not mere speculation.[55]

Goodwill or future profits turn on predictability or probability of a sale, not on its timing. These are profits over and above those that have been earned. They are unrealized.[56] However, if the "profits" in question are considered by the court to be so remote as not to deserve even the application of a probability adjustment such as in *Athey*, then they do not create goodwill or a future profit.

Where there are clearly lost future profits but they cannot be specifically traced to identifiable assets, whether tangible or intangible, the lost future profits are often characterized or quantified under the nomenclature of "goodwill." In principle, lost goodwill attributable to the infringement should be compensable in the same manner as lost future profits from identifiable assets. However, it is more difficult to establish the value of the lost goodwill in the period following trial. Regardless of the difficulty and to some extent on account of it, such profits must reflect the time value of money and the risk inherent in the cash flows and the related calculations. Because goodwill is often reflected in the value of common shares, it may be appropriate to look there for indicia of lost goodwill in either an accounting or damages calculation.

2.8 Springboard Advantages

In awards of damages, the principle of springboard or accelerated entry damages are an accepted head of damages in Canada, the United Kingdom, and the United States.[57] An example would be where a defendant entered a software market ahead of the expiry of a patent, thus creating an installed base of products that would be difficult for customers to replace, denying the market to the plaintiff and capturing the sale of future, non-infringing products for the defendant.[58]

Although springboard advantages have not previously been considered in the case law, there seems to be no reason why similar advantages should not be captured in an accounting of profits under both the Actual Profits and the Differential Profits approaches.

3.0 COSTS

Under both the Actual Profits and the Differential Profits approaches, the determination of costs to be deducted in the computation of profits is the most contentious issue. The deduction of fixed costs or a part thereof and the cost of capital are frequently the most problematic areas. Typically, the problems are not factual but relate to the relevant principles or paradigms—once that is sorted out, many of the mechanical difficulties disappear.

Nevertheless, the characterization of variable and fixed costs, and thus profit, was much easier in the "old world economy." Costs were typically more tangible, more readily identified, and more clearly in one category or the other. Measurement of complementary research and development of intellectual, human, and intangible capital requires more insightful thinking.

Although first principles are the best starting point, it helps to know some of the accounting jargon and concepts in addressing the mechanics. This section introduces some basic accounting concepts or principles and terminology and then reviews the deduction of relevant costs including fixed costs and the cost of capital.

It should be noted that accounting concepts are simply tools that may or may not be appropriate for a given purpose. Just as managers will use different accounting concepts of profits in making different types of decisions, in order to arrive at the correct calculation of profits in litigation the accounting method used must be consistent with the underlying legal concepts. The accounting concepts are the tools and servants of the law and not the other way around.

3.1 Variable and Fixed Costs, Variable and Absorption Accounting

A fundamental accounting concept is the division of costs into variable and fixed costs.

- Variable costs vary directly with the volume of a specific activity—for example, the raw material used in manufacturing a product.

"Step variable costs" are costs that are fixed over a volume range but increase to a new level as volume moves up out of the range. They move down in a similar step fashion as volume drops out of the range. The costs may vary not just with volume but with time or other parameters.

- Fixed costs do not vary with the volume of production—for example, the depreciation or taxes on a warehouse owned by the company.

The distinction between variable and fixed costs is tied to the time frame under consideration, since in the long term all costs are variable costs. "Semi-fixed" costs are costs of a type that are usually considered fixed but vary with activity in the specific context. For example, the cost of warehouse ownership is usually a fixed cost, but if a particular new product line requires the purchase of a second warehouse, it is a semi-fixed cost, because in this context the cost of warehouse ownership is directly tied to a particular product introduction. Generally, semi-fixed costs can be treated in the same way as variable costs, because on any particular set of facts both are directly attributable to the infringing product.

There are two basic accounting concepts in determining the cost of a product or project:

- variable cost accounting; and
- absorption cost accounting.

These two accounting concepts drive profit calculations. They both treat variable costs as an expense but vary in their treatment of fixed costs, and are used for different purposes in business management.

Variable cost accounting is often described as differential cost accounting in accounting literature, but bears no direct relationship to "differential profit" determined under the Differential Profits approach. To avoid confusion, we will use the term variable cost accounting when referring to the accounting concept.

Variable cost accounting ignores fixed costs, and calculates profit as the difference between the incremental revenue and variable or incremental costs associated with a product based on the specific volumes and time frame under review. Variable cost accounting is used by managers to decide between alternative courses of action in the relatively short term. Suppose that a company is a manufacturer and distributor of goods, with a factory and warehouse as well as administration, sales, and distribution systems. The managers wish to determine which of two new small product lines to introduce; the company doesn't have the capacity to introduce both. Fixed costs are irrelevant to this decision, because they will not change over the time period in question. To compare the two product lines, one deducts variable costs from projected revenue for each of the products and then chooses the more profitable of the two.

A drawback of variable cost accounting is that even if every line of business in a company is profitable when variable cost accounting is applied, the company as a whole will lose money if fixed costs are not covered. It is a narrow-purpose tool with a short-term time frame.

Absorption cost accounting is therefore used to determine overall or long-term profitability of the business. It allocates a share of all costs, including the fixed costs, to each line of activity or product. The allocation basis for the fixed cost depends on the type of overhead: for example, warehouse costs might be allocated to different product lines proportionate to the amount of warehouse space taken up by each product. The basis for the variable cost allocations is much the same as in the variable cost accounting. Step variable costs are treated consistently with the duration of the period under review.

3.2 Differing Cost Approaches

Three distinct philosophical cost umbrellas or bases can be used to determine profit: the generally accepted accounting principles (GAAP) approach, a management accounting approach, and an economic approach. Under each umbrella,

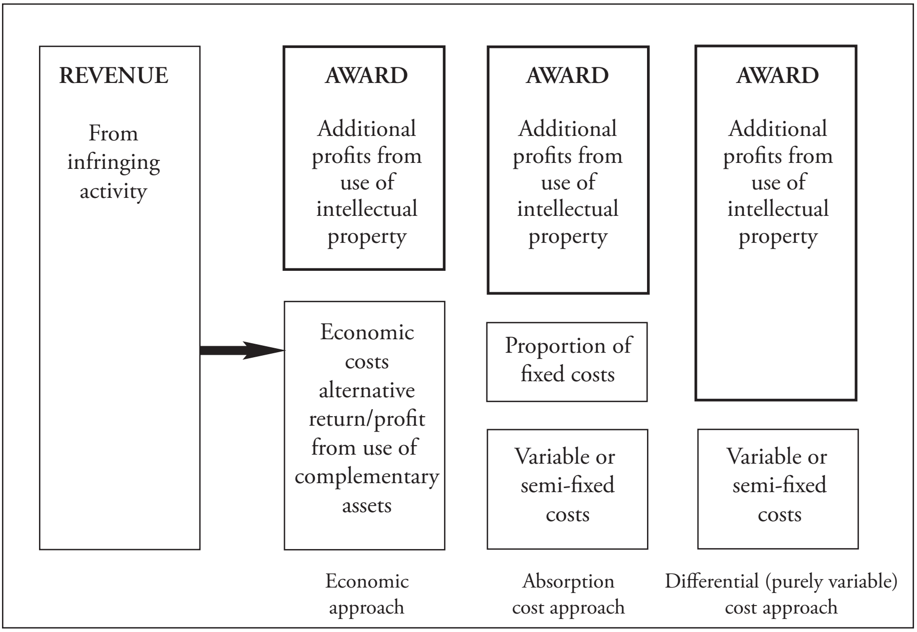
Figure 3 The Components of a Profits Calculation

Conceptual Framework for an Analysis of Profits
Revenues *minus* Variable costs *equals* Contribution margin or incremental profit by application of the variable cost method (often only of a short-term nature) *minus* Appropriate fixed costs *equals* Profit according to absorption method; closer to profits according to GAAP (often of a more long-term nature) *minus* Cost or lost opportunity associated with all complementary assets deployed in the production of profits from the IP, including intellectual, financial, human, and physical capital, not otherwise taken into account above *equals* Economic profits, which are roughly equal to the result under the Differential Profits approach

one can examine variable, fixed, and semi-fixed costs; each approach addresses these costs differently. Though the three approaches can be distinguished from each other, at the margins they bleed into one another. Figure 3 provides a preliminary view.

The usual impact of the three approaches on an accounting of profits award is summarized in figure 4. Use of absorption cost accounting rather than a variable cost accounting approach necessarily results in a smaller award because the absorption method allows deductions of fixed costs as well as the variable and semi-fixed costs. It is more comprehensive, but not always more appropriate.

Figure 4 Different Direct Approaches to Profit Determination



We are deliberately not attaching the above labels to the profits computed by the Actual Profits approach or the Differential Profits approach. We will do so below under the cost categories.

3.3 Variable Costs

Over the long run, all costs are variable. Hence, choosing appropriate deductible costs is in part a function of the time over which the disgorging is being measured. The slotting of costs into a category (variable, fixed, and semi-fixed or semi-variable) may be expected to vary across industries, volume, contexts, and time frames.

For example, full production of the infringing products may have gone on for only a short period of time but if the plant was at capacity and could easily have been fully deployed in the alternative, then perhaps all costs ought to be considered as deductible. If, however, the plant had significant excess capacity and no alternative use, perhaps the profits ought only to be burdened by variable costs.

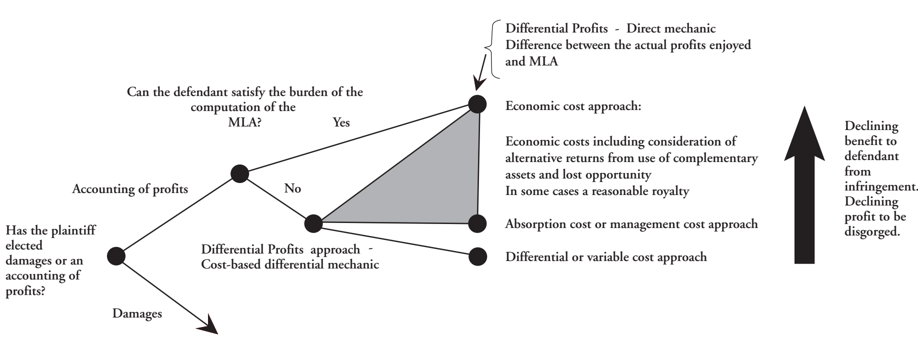
To decide the deductibility of costs in the computation of profits to be disgorged, care should be taken to focus on the characterization of costs rather than on whether they are variable, fixed, or semi-variable. In general, variable and many semi-variable costs may be deducted. Much more contentious is the deduction of fixed or overhead costs.

3.4 Fixed Costs

The question whether to allow deduction of some share of fixed costs by using absorption cost accounting has been controversial under the Actual Profits approach. The argument in favour of deducting a proportionate share of fixed costs is intuitively simple: "The basic truth [is] that no article of manufacture can be profitable in a real sense if it cannot bear its proportionate share of the fixed costs."[59] If variable cost accounting were the sole judge of profitability, as earlier noted, a business could lose money year after year, even if every product it sold was "profitable." For this reason, in determining the overall profitability of a business, absorption cost accounting allocates a proportionate share of fixed costs to each product line. The argument against deducting fixed costs is equally straightforward. Since fixed costs by definition are not increased because of the infringing product, they would have been incurred even in the absence of the infringement and so should not be deducted in the short run.

Typically, where the defendant has infringed and in fact has made more profit than would otherwise have been the case, the greatest profit would be produced by subtracting only variable costs. Additional costs based on absorption or contribution accounting would produce a lesser profit. Still lesser profit would result from the deduction of economic costs that would fully reflect use of complementary assets and the lost opportunity. The result of deducting all these costs would be precisely the profit reflecting the most likely alternative as would have been computed directly under the Differential Profits approach. These gradations of calculation are illustrated in figure 5.[60]

Figure 5 Decision Tree to Arrive at Appropriate Method Based on the Facts



Where a defendant has no most likely alternative (that is, the MLA is no additional activity), the next crucial question is whether or not the infringing company had excess capacity. If there was no excess capacity, then the infringing product would have displaced some alternative product, and the lost profit from that forgone alternative could be recognized as an opportunity cost or, in effect, what would have been produced becomes the MLA in the economic sense. However, if there was excess capacity and no other product was displaced, then there was no opportunity lost and often no cost deduction is allowed.[61]

In such a case the profit could be the same under the Teledyne Actual Profits approach and the Differential Profits approach. Note, however, that this does not answer whether costs are determined on a purely variable accounting basis, or whether semi-fixed or fixed costs will be considered.

Much the same point has been made by the Australian High Court in *Dart Industries v. Decor.*[62] *Decor* manufactured plastic kitchen canisters with a press button seal that infringed Dart's patent. The majority of the High Court wrote as follows:

> [T]here is no evidence in this case Decor or Rian had unused or surplus capacity. There was evidence that the infringing canisters were an integral part of one consistent product range produced, marketed and sold according to a common system. From this it might be inferred that, had those companies not been engaged in the manufacture and marketing of the infringing press button seal canisters, their capacity for those activities would have been taken up in the manufacture and marketing of alternative products.
>
> Thus the cost of manufacturing and marketing the press button seal canisters may have included the cost of forgoing the profit from the manufacture and marketing of alternative products. The latter cost is called an opportunity cost. …
>
> In calculating an account of profits, the defendant may not deduct the opportunity cost, that is, the profit forgone on the alternative products. But there would be real inequity if a defendant were denied a deduction for the opportunity cost as well as being denied a deduction for the cost of the overheads which sustained the capacity that would have been utilised by an alternative product and that was in fact utilised by the infringing product. If both were denied, the defendant would be in a worse position than if it had made no use of the patented invention. The purpose of an account of profits is not to punish the defendant but to prevent its unjust enrichment. …
>
> Where the defendant has forgone the opportunity to manufacture and sell alternative products it will ordinarily be appropriate to attribute to the infringing product a proportion of those general overheads which would have sustained the opportunity. On the other hand, if no opportunity was forgone, and the overheads involved were costs which would have been incurred in any event, then it would not be appropriate to attribute the over heads to the infringing product. Otherwise the defendant would be in a better position than it would have been if it had not infringed.[63]

The High Court in *Dart Industries v. Decor* would allow deduction of some part of the *fixed cost*s if, and only if, the defendant can prove that he lost a reasonable alternative opportunity to otherwise recoup those costs (or incurred an "opportunity cost") by forgoing the production of alternative products.

Compare this with our statement above that the Schmeiser approach requires that if, but for the infringement, fixed assets would have been used to make profits in an alternative venture, then the *cost of this lost opportunity* must be deducted from the actual profits calculated using differential cost accounting. The two statements are subtly different. While the High Court approach recognizes the importance of a lost opportunity, it does not allow deduction of the holistic associated opportunity cost, as is implied by *Schmeiser*. Instead, fixed costs are used as a kind of proxy for opportunity costs, or the opportunity cost is limited to cost recovery, and no "profit" element is allowed to be retained by the infringer.

The concurring opinion of McHugh J. in *Dart* is more consistent with the Schmeiser decision. In his view, the Differential Profits approach is not used and opportunity costs are not deducted directly only because of the difficulty of calculation. Deduction of a portion of fixed costs is used a rough substitute because the principles of absorption cost accounting are well established and deal with established facts rather than with difficult hypotheticals.[64]

The *Dart* approach is not inconsistent with the facts of *Teledyne*, which has been taken as establishing a rule that a proportion of fixed costs is not deducted in an accounting of profits using the Actual Profits approach. In *Teledyne* the defendant company, Lido, distributed shower heads that infringed the plaintiff's patent as part of a more than 150 product lines.[65] The argument was expressly made before Prothonotary Preston that another product line had been displaced (and an opportunity cost incurred). Prothonotary Preston noted the argument on this point immediately after quoting from Levin, a U.S. Eighth Circuit Court of Appeals case that held that if no opportunity cost was incurred there should be no deduction of a proportion of the fixed costs.[66] It is a reasonable inference that Prothonotary Preston refused the deduction of fixed costs because on the facts he judged that there was no lost opportunity, just as *Levin* (and *Dart*) require. This does not imply that fixed costs should *never* be deducted; in particular, *Teledyne* is consistent with the position that fixed costs or some portion thereof may be deducted if the defendant can establish on the facts that, but for the infringement, some non-infringing opportunity would have been taken up.

3.5 General Commentary on Costs

In the nine pre-*Schmeiser* accounting of profit decisions, Canadian courts have followed a modified variable costing method as approved by Addy J. in *Teledyne*:

> To summarize: the infringer is entitled to deduct only those expenses, both variable and fixed, which actually contributed to the sums received and for which he is liable to account. It follows that no part or proportion of any expenditure which would have been incurred had the infringing operation not taken place, is to be considered as deductible.[67]

This statement is often taken to have established a rule that fixed costs are never to be deducted in an accounting in Canada. However, while the Federal Court of Appeal has reviewed cases applying such a rule without comment, that court has not specifically approved that rule, and it should be noted that in a prior Exchequer Court decision the court allowed the defendant to deduct a fair proportion of fixed overhead expenses, albeit with much less thorough reasoning.[68] We have suggested that the Differential Profits approach implies that fixed costs may be deducted *if* the defendant can establish that, but for the infringement, some non-infringing opportunity would have been taken up. This position is also consistent on the facts with *Teledyne*.

Details of the five pre-*Schmeiser* cases that have proceeded to the point of classifying specific cost deductions as allowable or not are set out in table 1. More details of these deductions may be found in a case-by-case listing of nine pre-*Schmeiser* cases found in the appendix to this article.

3.5.1 Manufacturing Costs

Various variable manufacturing costs are deductible, such as costs for raw materials, pieces of manufacturing equipment, freight costs, repair department costs,[69] labour costs, and the costs of units that are substandard and cannot be sold.[70] These costs would also include royalties paid for the use of intellectual properties in the infringing goods, although this issue has not yet arisen in the Canadian courts. When costs have both variable and fixed components, courts can allow some costs to be deducted, as occurred in *Hancor* with electricity costs.[71] Property taxes and depreciation costs are usually considered fixed.[72]

3.5.2 Sales Costs

Sales costs are usually a mixture of fixed and variable costs. Staff salaries can certainly be deducted if they are additional hires taken on to handle increased work from the infringing product. Items such as travel costs, shipping freight expenses, and promotional or coupon costs can vary with the amount of product shipped. In *Teledyne*, commissions, shipping costs, employee benefits, travel, advertising, printing, and general expenses were found to be variable and deductible. In the *Diversified* case, the court allowed the deduction of a portion of "common costs" that were proven to be increased by the infringing activity—insurance, taxes, capital taxes, depreciation, advertising, shipping salaries, shipping expenses, express and cartage, truck expenses, and the rental of additional warehouse space.

3.5.3 Marketing Costs

In *Teledyne*, a deduction was also allowed for cooperative advertising expenses. However, the costs associated with designing and executing a company's advertising campaign, including preparing product packaging and arranging for customer surveys, were not normally directly tied to the volume of production, and so were not deductible. If an advertising campaign is mounted directly for an infringing product line, it might be considered to be a variable expense that is tied to the earning of profit by the infringement, and therefore deductible.

Table 1 Case-by-Case Cost Analysis

	Teledyne v. Lido	*Ductmate v. Exxano*	*Rucker v. Gavel's Vulcanizing*	*Diversified v. Tye-Sil*	*Wellcome v. Apotex*
Accounting and office expenses			Yes		
Additional warehouse space				Yes	
Bad debts			Yes		Yes
Cooperative advertising	Yes				
Costs of moulds and dies	No		Yes		
Design expense for pamphlets and owner manuals				Yes	
Equipment			Yes		
Excess of pre-infringement expenses over pre-infringement revenues		No			
Factory expense			Yes		Yes
Failures			Yes		
Financing expenses	Yes				
Freight costs	Yes		Yes & No		Yes
Insurance/taxes/depreciation/ advertising				Yes	Yes (advertising and promotion)
Interest charges on retained earnings			No		
Labour costs			Yes	Yes	Yes
Legal fees	No	No			
Printing costs	No				
Product costs	Yes		Yes	Yes	
Product costs of destroying infringing products	No				
Repair department costs	Yes				
Salary of salesperson				Yes	Yes
Sales commissions	Yes				Yes
Shipping costs	No			Yes	
Travel					Yes

3.5.4 Administrative Costs

Some administrative costs short of taking on additional staff are variable and have been held to be deductible. For example, in *Rucker*, a deduction was allowed for accounting and office expenses attributed to the infringing product. In addition, an amount for "bad debts" was allowed in *Rucker*, *Teledyne*, and *Wellcome*. In contrast, expenses such as executive salaries, office property taxes, and depreciation have been held to be fixed costs and not deductible under the variable cost regime.

3.5.5 Legal Costs

Legal expenses related to defending the present action are clearly not deductible as an expense.[73] However, legal expenses otherwise incurred in the normal course of business appear to be deductible as long as they were adequately tied to the making of profits from the infringement.

3.5.6 Bonuses

Baker Petrolite Corp. v. Canwell Enviro-Industries[74] raised an interesting issue concerning substantial bonus payments made to the sole shareholder and director of an infringing corporation. The court found that the bonuses were designed to reduce the corporation's taxable income to "just below the threshold at which a substantially higher corporate income tax rate would apply."[75] The court disallowed the deductibility of these bonuses on the ground that there was not sufficient evidence to establish that the bonuses constituted reasonable compensation.[76] This holding fits with the Differential Profits approach if we suppose that, but for the infringement, the director would not have been engaged in an undertaking sufficiently lucrative to require (or permit) such large bonuses.

3.5.7 Costs of Units Ordered Destroyed by the Court

The costs of production of products subsequently ordered destroyed by the court and the costs of complying with the order were held to be non-deductible by Addy J. in *Teledyne* because these expenses do not "actually contribute to the earning of the amounts realized by the defendant on the sale of the infringing [items]."[77] This reasoning is not consistent with the Differential Profits approach, because the cost of producing the destroyed products would not have been incurred "but for" the infringement.

A blanket disallowance of the deductibility of the costs of production of products subsequently ordered to be delivered up or destroyed may also lead to illogical treatment of the infringer in some cases. At one simple level, facts may be presented that these costs did contribute to the earning of revenues from the sold items. For example, if products are produced in a batch manufacturing process, the cost of producing the entire batch of products was necessarily incurred to allow the sale of any of the products of the batch.

On another level, thought needs to be given to the theories behind the remedies being applied. Suppose a company makes five infringing items, sells three of them, and leaves two in inventory. Are these separate infringements, or one infringement? Is an accounting of profits a remedy only for the three sold items, or for all items? One simple answer is that the accounting of profits remedy only applies to the three sold items, and that a separate remedy of delivery-up or destruction applies to the two items in inventory, which is consistent with the non-deductibility of the costs of production of the two unsold products. If the goods are destroyed, is this cost deductible? If they are delivered up, should they be delivered up at the infringer's cost? In contrast, if the accounting of profits remedy is applied to all five items, it would be logical to allow the infringer to deduct the costs of production of unsold items.

There may be occasions when it may be consistent with the theory of the defendant as a quasi-trustee to require the defendant to preserve and deliver to the plaintiff the value of any produced and unsold items, whether through delivery-up or sale and remittance of the proceeds, and to forbid the unsold items' destruction at the choice of the defendant. While this is a logical result, there are further complications (what if the items can be modified to be non-infringing?), and there is case law tending to contradict this position.[78]

3.5.8 Research and Development Costs

Many businesses incur substantial research and development costs. There is little mention of these costs in the examined Canadian cases, although their possible deduction was argued before MacKay J. in the *Wellcome v. Apotex* reference.[79] The deductibility of research and development costs, like other sunk costs incurred prior to the time of infringement, should depend on their applicability or contribution to the infringing profit in question, assessed on the facts on a case-by-case basis.

Generally, under GAAP, "research" costs are expensed immediately, while "development" costs are capitalized and amortized over time. As discussed below, GAAP usually has limited applicability in a damages or accounting of profits reference. It does seem possible that costs incurred in preproduction research may in certain circumstances be deducted from revenues incurred during a later time period.

Research and development costs for aborted research should generally be allowable based on the theory that bona fide research and development costs are a cost of staying in business and staying competitive. In England, the *Celanese* case included deductions for both successful and unsuccessful research expenses.[80] Because the expenditure was relatively constant over time, it was thought proper to assign them to the accounting period in which they were incurred. Research and development expenditures may be relatively constant over the years or they may vary. A proper averaging ought to be applied to determine the acceptable aggregate deductible amounts.

While these costs may include a large fixed component of preproduction research, there may be ongoing research to adapt products to the needs of specific customers. In such cases, these costs could arguably be deducted as variable costs.

Where revenue has been generated from the sale of research and development, such appropriately accounted for revenue should reduce the overall cost of research and development. Proper apportionment of research and development costs over all the areas affected is also necessary to support an acceptable deduction.

3.5.9 Intangible Costs Common to Knowledge-Based Industries

The deductibility of research and development costs would be much easier if there were a greater acceptance of such intangibles being a complementary asset of the firm, utilized directly or indirectly in profit creation. Under the influence of the GAAP paradigm, which generally does not recognize this resource as an asset, it is easy to ignore this intangible complementary asset's role in profit creation. Similar commentary could be made about many other development costs associated with human and intellectual capital, brand assets, proprietary and patented know-how, and distribution and sales channels.

The costs described above are typical of many knowledge-based industries. Many service- and technology-based businesses that do not also manufacture products have little in the way of hard traditional assets or related costs. As noted later (section 4), in *Wellcome v. Apotex* MacKay J. highlighted the importance of recognizing costs associated with intangible complementary, including efforts in developing a product as well as efforts in developing its market and channels for sales and distribution. Clearly, the door was already opened in the pre-*Schmeiser* regime for the apportionment of the cost of complementary assets not recognized by GAAP associated with human and intellectual capital, brand assets, and the like.

If the Differential Profits approach is applied, in some cases these intangible costs will effectively reduce the profit to be disgorged, depending on causation and the "but for" alternatives.

3.5.10 Stock Option Costs

Stock options are a vital part of many employment packages. GAAP requires recognition of the opportunity lost in the giving of stock options.

Stock option costs may be variable, semi-variable, or fixed, depending on the role of the employees in the specific matter. The deductibility of stock option costs requires movement toward a more economic concept of profits, similar to the discussion above concerning financing costs.

3.5.11 Income Taxes as a Deductible Cost

Under *Interpretation Bulletin* IT-365R2 of the Canada Revenue Agency, an award of profits arising out of an accounting of profits will be taxable to the recipient either as normal business income or as a capital gain, depending on what the income would have been if it had been earned in the normal course. Similarly, the profits being disgorged by the infringer would normally have been business profits and as a consequence, if they are to be disgorged, they may logically be deductible by the infringer.[81]

Assuming that the profits to be disgorged were deductible by the payer and taxable to the recipient as income or capital, it follows that they ought to be "pre-tax profits." They should not be subject to any notional deduction for income taxes. This approach is consistent with the finding of Laddie J. in *Celanese*, who emphasized the importance of the defendant disgorging its net profits:

> [The English *O'Sullivan* case] does suggest that the defendant should pay over his "actual" profits, meaning his profits net of all proper deductions, including tax. What happens if the tax is recoverable is another matter and does not detract from the general principle. Therefore, at least where the tax is irrecoverable, what the plaintiff is entitled to is not the stream of income received by the defendant but his net benefit. …
>
> If at some stage in the future BP applied for and obtains either a tax reclaim or a tax credit, the effect will be to put back into its hands a part of the profits which, by reason of the infringement, belong to HC. This would not be consistent with the order for an account. I am prepared to order that BP must disclose to HC any attempt it makes, whether under section 33 of the 1988 Act, by means of a tax credit or otherwise, to recover in whole or in part the tax paid on the proportion of its profits for which it has to account in these proceedings and the result of any such attempt. I am also prepared to order now that to the extent that any such attempt is successful, BP must account to HC for that recovery.[82]

In Canada, if disgorged profits are deductible, their deductibility will generally result in a full reclamation of any taxes paid and, hence, it is unnecessary to look at the after-tax amount.

3.6 The Cost of Capital

If a company incurs a loan solely for the purpose of financing infringing activity, the interest on the loan is clearly a variable cost and is deductible. This is in accordance with both the Actual Profits and the Differential Profits approaches, and is uncontroversial in prior case law: interest on bank loans and interest payments for capital obtained to support the gaining of profit from the infringement have been deducted in *Teledyne*, and were allowed by Giles A.S.P. in *Ductmate*.[83]

In *Rucker Co. v. Gavel's Vulcanizing Ltd.*,[84] a claim for interest on retained earnings was rejected under the Actual Profits approach on the basis that it was not an allowable cost under variable cost accounting principles. This is true and one possible result under that approach. However, it ignores the source of those actual profits. To the extent that a company finances an infringing product line from retained earnings, the company would (in the most likely alternative) have used that money for other purposes. The company has forgone some other opportunity to make profits with those funds. The company could have placed the money in a bank account and earned interest, it could have invested it, or it could have reduced debt and thereby saved interest expense.

In other words, even if the most likely alternative was otherwise to do nothing, the company will still have incurred a cost for the use of capital.

Under the Differential Profits approach, where the most likely alternative is an alternative product or service such that funds to be disgorged are deployed therein, a return on the capital is embedded in the resulting profit. Hence, it is implicitly being considered $P_A - P_{MLA} = P_{DPA}$.

Because the cost of capital is a true economic cost, under the Differential Profits approach if there is no most likely alternative, the interest hypothetically earned is included in the P_{MLA}, or the opportunity cost must reflect the alternative use of funds. An explicit financial investment of the funds is the most likely alternative. The appropriate return or profit on the funds is not less than a risk-free investment return such as treasury bills or government bonds, and not more than the full entrepreneurial profit to which the funds might otherwise have been deployed.

Under the Actual Profits approach, however, this latter amount, the full entrepreneurial profit, is the very profit (perhaps less the risk-free rate) that may have to be disgorged.

3.6.1 What Is Capital?

Capital generally refers to all interest-bearing debt, shareholder loans whether interest-bearing or not, share capital of all classes, retained earnings, and other amounts typically included in equity. It is more than the owner's equity or retained earnings. This concept of capital is not summarized in GAAP-based statements, though all the necessary information is contained therein for the calculation of capital.

Typically, GAAP-based statements are based on the formula that equity equals assets less liabilities. Capital, as we use the term in this article, includes GAAP-based equity *plus* certain liabilities that are typically included among GAAP-based liabilities. Figure 6 illustrates the two economic definitions of capital.

3.6.2 The Appropriate Cost of Capital

What is the appropriate cost of capital? Two basic principles come into play. First, capital cost can only be deducted if the opportunity to earn such a return would have been enjoyed "but for" the infringement. Second, costs are assessed with the full benefit of hindsight; or, as is sometimes said, the plaintiff must take the infringer as it finds him.

As noted above, where a loan is incurred solely for the purpose of financing infringing activity, the interest on the loan is a deductible cost at the rate actually paid.[85]

Figure 6 Economic Capital Definition

	Balance Sheets	
	GAAP Base	Economic Base
ASSETS	$1,000,000	$1,000,000
LIABILITIES		
Accounts payable	100,000	100,000
Bank debt	200,000	
Mortgage payable	300,000	
Shareholders' loan	100,000	
Total Liabilities	700,000	100,000
EQUITY		
Share capita	1,000	
Retained earnings	299,000	
Total equity	300,000	
TOTAL CAPITAL		900,000
Total	$1,000,000	$1,000,000

The established principle of equity that the infringer's actual position is assessed with the full benefit of hindsight leads to curious results from an economic perspective. Two defendants could commit identical infringements with regard to the same plaintiff and yet the award would be different if everything else were equal other than capital structure. If one defendant were financed with interest-bearing debt at X percent per annum and the other with an otherwise identical loan at (X – 2) percent per annum, the plaintiff would receive much less in the former case than in the latter. The rationale may be a practical one: a consistent result would be obtained if the defendant were presumed to have used the optimal financing structure, but this would raise difficult questions as to what the optimal financing structure available to the defendant might have been. The results are consistent, however, in that in both cases the defendant is left with nothing to show for its infringement. This is the consistency aimed at by an accounting.

The preceding analysis of the cost of capital intentionally did not refer to *Schmeiser*. Embedded in a comprehensive "but for" analysis will be an economic cost of capital. Reduction of profits to be disgorged by the profits of the most likely alternative that would be enjoyed in the most likely alternative effectively captures the cost of capital. The whole "cost of capital" question is subsumed in the direct computation of the value-based differential under the *Schmeiser* principles.

What is the opportunity cost if it is to be discretely computed under the cost-based differential mechanism?[86] The starting place for the determination of an equitable cost of capital is an appreciation of the underlying components. Typically, the cost of capital is measured as the sum of a risk-free interest equivalent amount plus a factor for risk in respect of all types of risk, including company-specific risk, industry-specific risk, public and private capital market risks, and the like. A portion of these latter risks is sometimes called the "equity risk premium." A cost of capital roughly equal to the above sum, without the equity risk premium, is probably not a controversial basis for determining cost in an accounting for profits. However, its deductibility in a specific case could be subject to the usual arguments and considerations common to all cost deductions. This aspect should capture the full lost opportunity—the profit component in the lost opportunity—not just the recouping of costs. It is the sum of the equity risk premium and the company-specific premium. In principle, the correct equity risk premium is the risk premium that would have been incurred on the best alternative project that the defendant would have undertaken. As we wrote in the 2001 article, this equity risk premium "might be considered the equivalent of the 'super profit' or 'entrepreneurial profit' returnable to the capital provider."[87] However, the risk premium will be more speculative and difficult to establish than the other elements of the cost of capital (risk-free interest, plus inflation).

4.0 APPORTIONMENT

The goal of an accounting of profits is to force the wrongdoer to disgorge all profits made by the defendant as a result of his infringement. This can quickly lead to difficult questions, because profits may spring from the use of many complementary assets in addition to the infringement itself, as noted by Lord Watson in *United Horse-Shoe*:

> When a patentee elects to claim the profits made by the unauthorized use of his machinery, it becomes material to ascertain how much of his invention was actually appropriated, in order to determine what proportion of the net profits realized by the infringer was attributable to its use. It would be unreasonable to give the patentee profits which were not earned by the use of his invention.[88]

Determining when and how to apportion profits has been among the most difficult legal questions in the pre-*Schmeiser* Actual Profits approach to determining the accounting of profits remedy.

Through apportionment, the Actual Profits approach converges in practice, if not in theory and methodology, with the Differential Profits approach. As noted by Rouleau J. in *Beloit v. Valmet OY*, the apportionment should ideally be made in respect of the value or saleability of the infringement in respect of the whole infringing activity:

> The test in determining if there should be an apportionment is based on the saleability, as a whole, of the product which contains the patented invention. The question for the court is whether the market demand for the defendant's product arose because of the infringed patent or whether it arose by virtue of the product's additional features. In other words, the inquiry is directed to "the value of the patented part to the machine as a whole," to use the words of Lord Shaw in *Watson Laidlaw*.
>
> The determination is a factual one to be made on the basis of all the evidence. … The onusis on the defendant to adduce sufficient evidence to satisfy the court that consumer demand for its product arose by virtue of features other than the plaintiff's infringed patent. If the defendant's evidence in this regard is inadequate, the court will not make an apportionment.[89]

The apportionment efforts in the pre-*Schmeiser* Actual Profits approach cases may thus be seen as reasonable attempts to implement a value-based apportionment without the benefit of an expressly value-based test as in the Differential Profits approach.

Apportionment will generally be moot if a Differential Profits approach is followed, since apportioning profit over different aspects of the defendant's activity would be unnecessary where there is a most likely alternative; the apportionment would already be embedded in the value-based differential profit determined with the Differential Profits approach. Many of the pre-*Schmeiser* Actual Profits approach cases can be reconciled with the Differential Profits approach on this basis.

However, if the defendant fails to prove a most likely alternative, the Differential Profits approach will resolve to an inquiry of the Actual Profits approach, making the issue of apportionment relevant.

While the goal of finding the value of the infringement (as stated by Rouleau J. above) generally underlies the apportionment cases, the results are predominantly shaped by the evidence and arguments placed before the court. The decisions seem often influenced by a desire to avoid hard outcomes. In light of *Schmeiser*, their use as precedent has to be carefully considered.

A good example of this is the *Beloit* case itself, where the defendant sold papermaking machines containing infringing press sections. Here, because there were only four sales of the infringing product, it was possible for the court to examine each sale individually for the suitability of apportionment of profits from that sale. Each purchaser testified to the technological and service considerations that drove the sale. This evidence was often confirmed through internal memoranda from the purchasing corporation or from Beloit itself.

In other cases, it may be impractical to follow the *Beloit* example and interview all purchasers of an infringing product to determine why they made their purchases. In such situations, it may be more appropriate to rely on market surveys and/or the court's own common sense.

On the basis of the evidence before him, Rouleau J. in *Beloit* was unable to conclude that the plaintiff's patented invention played any factor in any of the defendant's four sales of the paper-making machines. Under a Differential Profits approach, the result would have been modest at best. The same is true under a strict Actual Profits approach using the saleability or market demand standard.

Nevertheless, Rouleau J. did not conclude that contribution of the infringement to the defendant's profits was negligible, resulting in a negligible accounting of profits award. Instead, since an apportionment was appropriate and there was a clear breakdown of prices and costs for the different elements of the paper-making machine, he awarded Beloit the actual profits of the infringing press sections only. In effect, Rouleau J. made a physical apportionment, equating the award to profits actually made by the sale of a separable piece of equipment incorporating the infringement.

In general, physical apportionment per se is an unreliable basis to judge the value of an innovation; even if the infringing item has its own independent market value, the infringement may contribute only a portion of that market value.[90] Conversely, a physically separable item may still contribute the whole value of the package. In the Australian case of *Dart Industries v. Decor*,[91] the invention was a press lid for containers. The Full Court, affirmed by the High Court on this point, held that the infringer was liable to account for the full profit, because "[i]t was the press button closure which *alone* created the market for these bases."[92] In other words, without the patented lid, the bases would not have been sold, so the entire value of the combination was due to the invention.[93]

An interesting contrast may be drawn between the approaches to apportionment in *Wellcome Foundation v. Apotex* in the Federal Court Trial Division and *Celanese International v. BP Chemicals* in the Chancery Division (Patents Court) of England.[94]

In *Wellcome*, the defendant Apotex was found to have imported and used an infringing chemical, TMP, as one of the two active ingredients in the drug Apo-Sulfatrim.[95] At the reference, Apotex argued that since (1) there were two active ingredients and (2) they had added or created much of the value in the finished product through developing a safe, stable, and effective product, applying for a notice of compliance (NOC),[96] and entering and developing the market as the first generic, the apportionment of the profits to the infringement should be at the least less than 50 percent. Apotex put forward three possible bases for apportionment: (1) the cost of the raw infringing material to the cost of the final tablet (a value-added calculation, awarding 6.7 percent of the profits to the plaintiff), (2) the cost ratio of the infringing active ingredient to that of the non-infringing active ingredient (28.57 percent), and (3) the ratio in the final tablet of one part infringing material to five parts non-infringing active ingredient (16.67 percent).

MacKay J., rejecting the plaintiff's argument that the higher potentiating effect of the infringing TMP entitled it to all of the profits, held that that an apportionment was necessary in this case. He also held that all of the ratios suggested by Apotex, including the value-added approach, underestimated the infringement's contribution to Apotex's profits. Noting that the medicine was not new when

Apotex entered the market, and that the policies of the provincial health programs had a significant impact on its success, he awarded 60 percent of the profits to the plaintiff:

> That ratio recognizes, albeit in a simplified calculation, that there are two active ingredients, that TMP is the more significant of the two in combination, and that the profit does result at least in part from Apotex's efforts to successfully develop the generic product and its market. I am satisfied that Apotex has shown that a portion of its profits may be attributed to SMX in the formulation as an active ingredient and to its successful effort in developing and marketing Apo-Sulfatrim. Recognition of that warrants apportionment of total profits to be accounted and in my view, fair recognition of that is provided by reserving 40% of Apotex's profits and apportioning 60% to the accounting of profits to be paid to the plaintiffs.[97]

This decision highlights the importance of the intangible complementary assets brought to bear by the defendant, including "its efforts in developing the generic product" and, separately, "its effects in developing the market" for the infringing product sold. The criteria for apportionment clearly included both tangible and intangible bases.

Laddie J. of the Chancery Division in England was cautious of this approach in the *Celanese* case. Here, the defendant had implemented an infringing process to remove iodide compounds from acetic acid at two of its plants. This cleaning step was only the last step in the production process, occurring after the acetic acid was actually produced. There was also evidence that the majority of the defendant's clients would have purchased the acetic acid regardless of whether the iodide compounds were removed. The plaintiff originally argued that it was entitled to all of the defendant's profits from the sale of acetic acid; however, it retreated from this position at trial, and agreed that an apportionment was necessary in this case. Laddie J. discussed the basis for apportionment:

> In *Potton* the profits icing was evenly spread over the whole project cake and Millet J. counseled against taking into account imprecise factors such as customer motives and the relative attractions of different parts of the project, at least as a general matter. I do not read this as laying down a rule requiring the court to ignore in all cases the relative importance of different parts of a composite article or process. In some cases the court may feel that, as a matter of fairness, more of the profit must be attributed notionally to some parts than to others. It may feel that the costs or expenses may not be an accurate reflection of contribution made by any particular part of the whole.
>
> An example of weighting is to be found in *The Wellcome Foundation* … [as discussed above].
>
> The attractions of following MacKay J.'s path are obvious. It releases the judge from mathematical constraints and allows him a wide discretion to pick whatever figure he thinks is fair. Nevertheless Millett J. warned against taking relative value into consideration in the absence of compelling evidence. That warning appears to me, with respect, to have much force.

> Adjusting the apportionment up or down in response to imprecise feelings that one part of a product or process is more or less valuable than another will add another layer of unpredictability to an exercise which is already difficult enough. It is also likely to result in the account being burdened with evidence directed to flattering or denigrating the relative merits of the different parts when, as a matter of commercial reality, the customer does not really distinguish one part from another. ... The concept of "value" is ill-suited to apportionment. It treats each step or part of the process or product as if it had an existence or value on its own. But if the process or product makes a profit, it does it as a whole. In most cases it is not realistic to say that one part is more important than another. Where the part cannot be severed from the rest and sold or exploited on its own it acquires its value by reason of its co-operation and interaction with the other parts.
>
> However there are cases in which credible evidence exists demonstrating that the invention has had an atypical impact on profits, either up or down. In particular it appears that in some cases an incremental approach to weight ing may be possible.[98]

The diversity of perspectives explored by Laddie J. in his decision are, in our view, more important than his findings, which are peculiar to the facts of the case.

Initially, to determine the grounds for apportionment, Laddie J. adopted (from Millett J. in *Potton*) the position that

> a useful guide was likely to be provided by ordinary accounting principles whereby, in the absence of some special reason to the contrary, the profits of a single project were attributed to different parts or aspects of the project in the same proportion as the costs and expenses are attributed to them.[99]

Laddie J. went on to propound a unique basis for apportioning profits in cases where there is one infringing step in a multi-step production process. He reasoned that there must be a "base" allocation of profits attributable to each step in a non-infringing version of the process. The "base" profit attributable to the infringing step in question must be awarded to the plaintiff in an accounting of profits. In addition, any additional profits created by the infringement must be awarded, in a step Laddie J. termed "weighting." For example, suppose that a process with five steps of equal importance made a $1,000 profit. Each step would have a "base allocated profit" of $200. Suppose that adding the infringement to a particular step saved the manufacturer $50. The award after apportionment would then be $200 + $50 = $250.

On the basis of the evidence before him, Laddie J. decided to divide the profit from the acetic acid production among the parts of the plant based on capital costs. The cost of implementing the infringing process was only 0.6 percent of the cost of the entire plant, so 0.6 percent of the profits was the "base allocated profit." Furthermore, because the use of the infringing process provided no particular proven benefit to the defendant, there was no basis to add a "weighting" to this award. The results of this calculation were dramatic: the plaintiff was awarded £567,840 from a profit of £96,640,000.[100]

The decision of Laddie J. in *Celanese* may have been appropriate based on the facts, scenarios, and arguments put to him. However, courts should be reluctant to follow his example in future cases. Dividing profits based on physical capital cost is used by accountants in the absence of better information, and there is no reason in general to think that the profit added a step to a process is proportional to the cost of the related physical capital deployed.

From the point of view of the Differential Profits approach, Laddie J.'s reasoning quoted above is notworthy. He rejected attempts to assess the "value" contributed by an infringement as speculative and adding to uncertainty. Instead, he preferred an approach based on available facts and accounting principles, but ended up straining logic to find such a grounded, numerical basis for his apportionment. The attempt to implement a value-based allocation indirectly, by using physical or cost-based approaches, gives rise to considerable doctrinal complexity. Perhaps it is sometimes impossible to craft a physical or cost-based rule that yields value-based results. In *Wellcome*, in contrast, MacKay J. attempted to find a value for the infringement, but the basis was highly subjective and irreproducible. The *Wellcome* decision in philosophy is more consistent with the Differential Profits test as set out in *Schmeiser*, but raises the question of the predictability of value-based apportionments other than the "but for" test.

In a final strain of cases, apportionment is influenced by whether the infringed intellectual property formed the whole or core of the item or service sold, or merely improved an otherwise non-infringing product. In *Teledyne*, Addy J. in the trial decision examined the evidence related to the device sold, and found that the improvements made by the defendant were trivial compared with the substance of the patent appropriated. The referee at the reference relied on these findings to refuse an apportionment of the profits.[101] Addy J. approved of the referee's analysis on appeal, noting that apportionment may be disallowed in cases where a patented item is sold, and stated that

> it might very well be that apportionment would not necessarily apply even if an improvement had in fact increased sales where, as in the case at bar, the invention was misappropriated and sold as a whole, as opposed to instances where the patented articles are used to improve an article previously being sold by the infringer or to improve the productivity of a machine or process already being used by the infringer. However, it is not necessary for me to decide this issue.[102]

This approach was used in the case of *Ductmate v. Exxano*. There, the item in question was a corner piece. The plaintiff held a patent on an offset that the defendant was held to be infringing. However, the defendant also held an applicable patent for a flange that was part of the corner piece. The referee, Giles A.S.P., held that this was an appropriate case for apportionment:

> I interpret the principle set out by Addy J. to be that where the subject matter of the patent is used to improve an existing article apportionment is appropriate. In this case not only is the subject-matter of the patent used to improve an existing article, but that article has been further improved by an invention patented by the defendant.[103]

This approach was confirmed by Reed J. on appeal.

The result under a Differential Profits approach might be the same as was achieved in *Teledyne* if the defendant's additions to the patented device were truly trivial. However, Addy J.'s statement in obiter dicta that an addition might well not require an apportionment even if it led to increased sales is difficult to reconcile with the Differential Profits approach. In contrast, the decision of Giles A.S.P. in *Ductmate* appears consistent with the spirit of *Schmeiser*.

Fundamentally, apportionment should not be led by the form of the claim, but should look to the value of the invention itself. In *Lubrizol Corp. v. Imperial Oil Ltd.*,[104] the Federal Court of Appeal held that a patentee should not be entitled to the whole profits simply because the whole product was patented. The claim in question was for the motor oil containing a dispersant additive—not just for the additive itself—so the whole product infringed the claim. The patentee argued that it was accordingly entitled to the whole profits. The Court of Appeal rejected this position in strong terms:

> Form must not be allowed to triumph over substance. While motor oil containing the dispersant additive was properly claimed in the patent (it would seem likely that the dispersant is useless except as an additive to motor oil) and while that claim was properly found to have been infringed, the reality is that Lubrizol did not invent motor oil and that Imperial's motor oils contain other additives than the one here in issue. …
>
> The remedy of an account of profits is an equitable one. Its purpose is not to punish the defendant but simply to have him surrender the actual profits he has made at the plaintiff's expense. But if some part of Imperial's profit on the infringing sales can be shown to have been due not to the appropriation of the Lubrizol invention but to some other factor where is the equity? … And even if no other patents were involved, to allow Lubrizol to take profits which Imperial succeeds in showing were solely attributable to some non-infringing feature of its motor oil would be to judicially sanction Lubrizol's unjust enrichment at Imperial's expense.[105]

4.1 Proof of Quantum

The *Ductmate* and *Beloit* cases held that the defendant must prove not only the suitability of the apportionment, but also its quantum or amount, for the apportionment to be applied. In *Ductmate*, the defendant produced no detailed evidence of post-infringement sales of corner pieces with the infringing offset removed. It argued that evidence that such sales had occurred proved that an apportionment was necessary, which the prothonotary had to estimate as best he could on the basis of the facts before him.[106] Instead, Giles A.S.P. ruled that the defendant had failed to prove the particular apportionment, which presumably would include proof both of the appropriateness of apportionment and the amount, so no apportionment was granted. However, he also characterized this result as unjust, and seemed willing to characterize it as shockingly unjust save for the refusal of the defendant to produce details of post-infringement sales.[107]

Similar concerns were reflected in the *Celanese* judgment, where the plaintiff argued that since the defendant had not met its burden of proof with respect to apportionment, the plaintiff should be awarded 100 percent of the profits in question. Laddie J., who did not refer to the *Ductmate* decision, dealt with the issue in this manner:

> [O]nce it is conceded or proved that an apportionment is appropriate, the court must do its best to split the profits between infringing and non-infringing parts. …
>
> Where an issue exists to which the answer is either yes or no, it is sensible and workable to impose an onus on one or other of the protagonists. One answer is correct, the other is wrong. There is no other possibility. But in my view, onus has little part to play when it comes to deciding on the level of apportionment. The court is trying to determine a point on a sliding scale. Its hands are not tied by the two or more alternatives put forward by the parties both or all of which may be wrong. Slade J. said in *My Kinda Town*:
>
>> ... In the absence of binding authority I am inclined to think that, at least in the very first instance, the Master should not regard the onus of proof as falling either on the plaintiffs ... or on the defendants ...
>
> This does not absolve the defendant of the necessity of giving proper discovery or supplying relevant information to allow the court to carry out the assessment. If insufficient material is available to allow the court to come to a fair adjudication, it may be that it will be necessary to adjourn to allow it to be produced subject to the questions of costs. It is no justification for pulling a figure out of the air which bears little relationship to any of the relevant facts.[108]

It seems that Laddie J. trod a fine line with this ruling. On the one hand, he held that the court must perform an apportionment to the best of its ability regardless of whether or not the defendant meets an onus to prove the extent of the apportionment. On the other hand, he held that a court cannot apportion profits to the patentee based on notions of relative value without "compelling evidence." This comes close to putting the onus to prove the amount of the apportionment on the plaintiff. In contrast, MacKay J.'s decision in *Wellcome*, where he decided that an apportionment was necessary despite the defendant's failure to prove the amount of the apportionment with compelling evidence and performed the apportionment based on the "relative value" of the products on the evidence before him, seems to be more realistic.

4.2 When Is Apportionment Considered?

In *Lubrizol*, the Federal Court of Appeal ruled that, in general, questions of apportionment are a matter of fact to be decided by the person responsible for the determination of the accounting, not solely by the judge at the trial for liability. Prior to *Lubrizol*, there was some debate over whether questions of apportionment have to be considered by the trial judge, or can be introduced at the reference stage:

> Just as in a reference on a claim for damages issues of fact relating to causality and remoteness may properly be explored, so may they be likewise on an accounting of profits. The issue of apportionment is at bottom a question of fact bearing on the relationship between the profits earned and the appropriation of the plaintiff's invention. It may be possible for [the defendant] to show that some part of the profits made on the infringing sales are not profits "arising from" the infringement in that they are not caused by but simply made on the occasion of such infringement. While such a showing may prove very difficult it should not be excluded a priori.[109]

This statement, however, should not be taken as empowering a referee to overturn findings of fact made by the trial judge relating to the appropriateness of apportionment. A defendant should be aware of the need to ensure that facts consistent with any desired apportionment be presented at trial.

5.0 PROFIT ON PROFIT AS DISTINCT FROM "PRE-JUDGMENT" INTEREST

According to Addy J. in *Teledyne*, the plaintiff is entitled to any profits made through a reinvestment of the profits earned through the infringing activity. Addy J. stated that since profits made through a reinvestment of the profits earned through the infringing activity *may* be impossible to ascertain, the plaintiff will usually be allowed compound interest at a rate above prime from the time the impugned profits were made:

> Interest from the profits realized is imposed in equity in order to prevent the unjust enrichment of the defendant who retains and thus is deemed to benefit from, the profits gained from his misappropriation. When one cannot from a practical standpoint (and this would happen in a majority of the cases) establish the extent of the additional profit earned on the original profits retained or where one cannot even establish that the defendant had actually employed the profits and thus benefited from them, he is deemed to have done so and is prevented from establishing the contrary. Interest at the current rate is then charged on the amount of profits retained.[110]

Where, on the facts of the case, one can actually determine the use to which the profits were put, the determination of the profit made on the profits is straightforward and not speculative. In some cases, one cannot necessarily physically trace the actual profits but one can effectively do so and the result should be the same—always subject to common-sense tests. Such considerations are only necessary under the Actual Profits approach and these will, by definition, be automatically captured in the Differential Profits approach.

Table 2 charts the actual rates used by the courts to determine "interest" on the profits on profits. It should be emphasized that this interest is deemed to be part of the profits of the defendant, and is not the equivalent of "pre-judgment interest" in a damages calculation.

Table 2 Interest Rates from Precedent Cases

CASE NAME	SPECIFIC RATE	COMPOUND PERIOD
Teledyne v. Lido	Bank prime + 1%–2%	Annual, Semi-annual
Ductmate v. Exanno	Bank prime + 1%	Semi-annual
Diversified v. Tye-Sil	Bank prime + 1%	Semi-annual
Wellcome v. Apotex	Bank prime + 1%	Semi-annual
Reading & Bates v. Baker Energy	Actual	Actual
AlliedSignal v. Du Pont	Actual	Actual
Beloit v. Valmet	Actual	Actual

The issue of interest in accounting of profit assessments was taken up by the Federal Court of Appeal in *Reading & Bates*. The court confirmed that this interest is integral to the award of an accounting of profits, does not need to be specifically pleaded, and its award in cases where the defendant cannot account for secondary or reinvestment profit is required by law and is "no discretionary matter."[111]

Finally, the court addressed the issue whether the interest should be compounded, and at what rate. Noting that the role of an infringer is somewhat like that of a constructive trustee for the rights holder, Létourneau J.A. clarified that the "rule" should be to award compound interest:

> There is no doubt that the analogy between an infringer and a trustee is an imperfect one. However, it is one that the courts, in their struggle to achieve equity, devised at a time when the awarding of prejudgment interest was not permitted at common law, but was emerging in equity. It eventually led, in this latter case, to the compounding of interest because compound interest became a modern reality and the reality of business life. The modern reality is that interest paid or earned on deposits or loans is compound interest.
>
> In my view, bearing in mind this reality and the need to achieve equity in the accounting of profits, the awarding of compound interest as deemed earnings on the profits is the rule, subject to a court's discretion to mitigate it or award only simple interest in appropriate circumstances. The good faith of the infringer is certainly a criterion that a judge can take into account in the exercise of his discretion: *91439 Canada Ltée v. Editions JCL Inc.*[[112]] Other factors could include the highly debatable validity of the patent claim or the fact that compounding the interest may reach beyond equity into the realm of punishment.[113]

The interest was to be awarded from the time the profits were made by the defendant to the date the amount of the account was decided by the court (often by adopting a referee's report). In addition, it was proper for the court to assume that the defendant would have made the most beneficial use of the profits and set the interest rate at the chartered bank rate for prime business loans.

It is open to courts to use a foreign interest rate in appropriate circumstances. For example, the Federal Court of Appeal in *Beloit*, where it was proven that the impugned profits were repatriated to Finland and reinvested, approved use of the Finnish base rate plus 1.5 percent.[114] The court also remarked that courts should strongly guard against using interest rates that can be over- or under-compensatory.

In many businesses, the most likely use of profits made through a reinvestment of the profits earned through the infringing activity will be the repayment of existing bank debt—that is the operating reality of most businesses. In these cases, the actual profit on the profits is the interest saved by paying down the loans, which would be at the actual rate of interest charged by the lending bank. Even if, in the absence of the profits, other cheaper funding would have been sourced within the operating reality of the defendant, the "take the defendant as you find him rule" likely requires that the lower cost of funds be ignored.

The preceding commentary is equally relevant in application of the *Schmeiser* principles. However, the issue may become moot under the Differential Profits approach. At least to the end of the computation period, the appropriate return on profit will be embedded in the value-based differential—$P_A - P_{MLA} = P_{DPA}$.

Where a cost-based differential mechanism is being applied, it will be necessary to apply the above-discussed mechanics because it will not be implicit in the value-based differential—$P_A - P_{MLA} = P_{DPA}$. See the discussion on the cost of capital in section 3.6, above.

In the *Wellcome v. Apotex* reference, it was disputed after the initial reference whether the interest, as a proxy for profit on profits, should be calculated from the date the defendant invoiced its customers, or from the date the customers actually paid. MacKay J. directed that the interest be calculated from the date of the invoice because "there was no other date established by evidence at the reference hearing on which interest calculations could be based."[115] The finding might be different if a specific collection pattern is established in evidence. One can usually estimate, on the basis of historical payment patterns, when receivables are typically converted into cash—it is generally easy enough to establish that X percent of accounts receivable are collected within so many days and Y percent are collected so many days later. This seems to permit the calculation of interest from the date of receipt of cash rather than the date of the invoice.

Since unpaid receivables are a firm asset that can be used to obtain financing, one might think that interest ought to be applied from the date of the invoice rather than the date of receipt of the related cash. However, the ability to finance the receivable comes with an interest cost that is precisely the opposite of the interest benefit the court is trying to measure.

Not everyone will agree with the above approach to determining profit on profit.

In the alternative, some may say that all profits, whether the result of infringing or non-infringing activities and not paid out to shareholders by way of dividends, are retained or reinvested and used in the business. Such reinvested profits form part of the equity of the business. Only by exception is it possible to match the particular use of those profits with any specific product or activity, or any increase or decrease in the debt or equity of the firm.

The return on that equity, made up of both infringing and non-infringing retained profits, is a measure of profitability. There are many different specific measures and it is beyond the scope of this article to further elaborate on the various alternative measures.

Applied to a profitable business, a return on equity based calculation of profit on reinvested profits will on average result in a higher profit on profit amount than would result from an interest rate proxy. It may or may not be higher than the return from a specifically identified use. Applied to a business in a financial loss position, the use of the return on equity method would give rise to no profit on profits.

Where the calculation of profit on reinvested profits is based on a finding that the reinvestment of infringing profits was by way of debt reduction, the result is a calculation that has many of the attributes of an interest of profits or pre-judgment interest calculation and it may therefore offend some for this reason.

This alternative approach might be called the homogeneous theory. The homogeneous theory is that regardless of physical tracing, effective tracing, or the “but for” approach, profit on profit is like water added to a bucket. It is impossible to differentiate which contribution to the bucket is nurturing the user, and hence the right measure of profit on profit is the weighted cost of capital to the infringer or some measure of the return on equity of the infringer.

To the best of our knowledge, the courts have not addressed the use of a return on equity method. The appropriate approach will likely depend on the specific circumstances of each case.

5.1 The Benefit of Interest Is on After-Tax Profits Retained

As noted above, the calculation of profits should be made on the basis of pre-tax profits, assuming that the profits to be disgorged are deductible by the payer and taxable to the recipient. Where large sums are involved over an extended period of time, the benefit to the plaintiff of receiving interest on pre-tax profits can be substantial and in excess of that earned in fact by the defendant, who would normally only have had the benefit of using the post-tax profits within his business. Hence, in most cases, care needs to be taken to derive the appropriate pre-judgment interest amount on after-tax profits.

6.0 ENTITLEMENT TO AN ACCOUNTING OF PROFITS AND DIFFICULTY OF THE REMEDY

It is well established that an accounting is a discretionary remedy,[116]and it is clear that the usual equitable concerns, such as "clean hands" or undue delay in seeking a remedy,[117] may be invoked as a basis for denying an accounting of profits. It is also clear that misbehaviour by the plaintiff in the course of litigation or otherwise is not the sole ground on which an accounting may be denied. Logically, inequitable behaviour by the defendant might be a reason to defer to the plaintiff's choice of remedy.

Within the established limits respecting equitable remedies, it has been common practice for the courts to permit plaintiffs to elect freely between an accounting and damages. However, this entitlement to a free election has been questioned by the Federal Court of Appeal in *AlliedSignal v. DuPont Canada*:

> While courts of law have, for some time, given the successful party a right to elect one or the other of these two recourses, it seems clear from recent experience that the choice between the two remedies cannot be left entirely to the successful plaintiff. Moreover, it certainly cannot depend on whichever amount would turn out, on inquiry, to be more profitable.
>
> [An accounting of profits] is not a punishment and should not be allowed to be used for that purpose merely by leaving it to the choice of a plaintiff.[118]

There is some limited support for the view that an accounting should be confined to cases where damages are difficult to prove or otherwise inappropriate. In the 1887 Supreme Court case of *Collette v. Lasnier*, Gwynne J. remarked, albeit in dicta, that "[i]t is only when, from the peculiar circumstances of the case, no other rule can be found that the defendants' profits become the criterion of the plaintiff's loss."[119] Wetson J. in *Wellcome Foundation v. Apotex* elaborated on a similar theme.[120] Nonetheless, free election remains the practice, and it remains to be seen whether recent remarks such as that by the Court of Appeal will mature into restrictions on the entitlement to an account, beyond the existing equitable limits.

The Court of Appeal's suggestion in *AlliedSignal* that a free election may be undesirable if it permits the plaintiff to punish the defendant raises an interesting point. It is clear that an accounting of profits is non-punitive in principle,[121] and this will be true in practice as well if the Differential Profits approach is used. However, the accounting of profits remedy does shift the focus of examination from the plaintiff to the defendant, with the natural though perhaps regrettable result that the plaintiff seeks to gain as much information about the defendant's activities as possible. It is the sometimes difficult task of the court to prevent discovery from going too far. Hugessen J.A. of the Federal Court of Appeal in *Beloit* stated:

> The defendant's profits from any part of its business are a matter peculiarly within its knowledge and regarding which it is reluctant to reveal more than it absolutely must, especially to the plaintiff who is its commercial competitor. The latter, by the same token, has a clear interest in obtaining as much

> knowledge as it can about the plaintiff's [*sic*; defendant's?] inner workings, an interest which is not necessarily limited to its interest in the present litigation. It is the duty of the court to attempt to steer between this Scylla and that Charybdis.[122]

However, the converse of this observation is that a damages remedy puts the focus of the examination on the business of the plaintiff, who is not the wrongdoer. The plaintiff in damages must often choose between revealing sensitive information and proving its case. Indeed, in some cases the investigation of damages might extend to an examination of the plaintiff's customers, an unpleasant prospect for any business.[123] Although not a focus of this article, avoiding discovery is a major reason that plaintiffs choose an accounting of profits over a damages remedy.[124]

Recalling that the defendant is a wrongdoer, an accounting of profits allows the plaintiff to avoid examination of its business if it is of concern. Similarly, although whether the accounting of profits award is anticipated to be larger than a damages award should not by itself determine the choice of award, if an accounting award is anticipated to be significantly larger, this seems to be a relevant equitable basis for allowing the plaintiff to have its choice of remedies. As stated by the U.S. Supreme Court, "It is inconsistent with the ordinary principles and practice of courts of chancery … to permit the wrongdoer to profit by his own wrong."[125]

6.1 Difficulties of Administering the Award

It is sometimes said that it is costly and time-consuming to assess the quantum in an accounting of profits.[126] It is in part for this reason that the remedy was abolished in the United States.[127]

However, it is unclear whether the difficulties of administering an accounting of profits are generally significantly greater than the difficulties of administering a damages reference. In particular, the Differential Profits approach makes explicit the similarities between an accounting of profits and damages. In both cases, there is a comparison between a factual, "actual" situation and a hypothetical, "but for" situation. A party—the plaintiff in the case of damages, the defendant in the case of an accounting of profits—will be exposed to discovery on the nature of its business to determine the actual and hypothetical positions. Expert accounting and/or valuation evidence will be needed to determine the actual and "but for" positions. As noted above, the primary difference between the remedies is the shifting of the focus of the inquiry.[128] There have been few damages references to use as precedent, but the *AlliedSignal* damages reference took a similar amount of time as *Wellcome Foundation v. Apotex*, the last pre-*Schmeiser* accounting of profits reference.[129]

At a high level, a pertinent difference between the two remedies may be the relatively unsettled nature of law in accounting of profits as compared with damages, where questions in the patent field may be answered by looking at damages in other contexts. Some judges have also complained that the accounting of profits remedy creates an opportunity for expert accounting witnesses to put forth confounding definitions and estimates of the profit actually earned by the defendant.[130] While this may occur, most conflicting expert opinions on accounting matters arise from disputes respecting legal questions as to the underlying principles of the computation. It is not difficult to agree on which costs can be deducted or what profit is if there is clarity as to the conceptual footing. As was reported by Rouleau J. after a long and contentious series of hearings in Beloit:

> accountants for both sides were able, without too much difficulty, to arrive at and agree upon the net profit, for the sales of the press sections as well as the entire machines, using the differential accounting approach.[131]

The Differential Profits approach from *Schmeiser* may serve to bring greater guidance to legal issues and expert evidence in an accounting of profits by permitting greater reference to the general law of torts, depending on developments in future case law. The Differential Profits approach may also greatly simplify the previously troubling apportionment and deduction of fixed costs issues.

6.2 Concurrent Damages and Accounting

It is clear that a successful plaintiff cannot have both an accounting and damages for the same injury, because this would result in double recovery.[132] However, many commentators suggest that courts may award different remedies for different injuries arising from the same infringement, as long as double compensation is avoided.[133] In trade-mark infringement cases, for example, the plaintiff can receive an accounting of profits as a remedy for the infringement as well as an award of damages for loss of reputation.[134] By statute, accounting of profits awards may be awarded along with damages in a copyright infringement, although presumably only for different injuries.[135]

In a patent case, a patentee may have lost profits as damages in respect of sales that it would have made itself, and a reasonable royalty for sales that it would not have made.[136] Although this point has not arisen in the case law, there seems no obvious reason why the patentee might not equally claim lost profits as damages in respect of sales that it would have made, and the infringer's profits in respect of sales that the patentee would not have made.[137]

7.0. EXEMPLARY OR PUNITIVE DAMAGES

Whether under an Actual Profits or a Differential Profits approach, it is settled that the accounting of profits award is non-punitive in nature.[138] The Differential Profits approach underscores this: as the Supreme Court noted, the "but for" causation principle underlies "non-punitive" remedies. An accounting takes from the defendant what was gained by the use of the invention, but no more, just as damages restore to the plaintiff what was lost, but no more. It is true that in many cases the quantum disgorged in an accounting will be greater than the amount that would have been recovered in damages. But this is not because the remedy itself is punitive; indeed, the opposite result may also be true.[139]

Although some cases such as *3925928 Manitoba v. 101029530 Saskatchewan* suggest that a successful plaintiff would not be entitled to both an accounting of profits and punitive damages, in principle it is not clear why this should be so, given that the accounting itself is not punitive.[140]

Since damages and accounting of profits are non-punitive in nature, they are not designed to deter infringement.[141] It may be that the Differential Profits approach to an accounting allows the defendant to infringe with impunity, because the remedy puts the infringer in a position no worse than it would have been in had it not infringed in the first place. Equivalently, in damages, commentators sometimes worry that an award of a reasonable royalty may result in infringement still being profitable, and amount to granting a compulsory licence.

By emphasizing that the accounting of profits is a non-punitive remedy, the *Schmeiser* decision also puts a spotlight on the availability of punitive or exemplary damages in Canadian patent law. Unlike ordinary property, the bounds and validity of a patent are often reasonably in question, and it is difficult to assess an infringer's *ex ante* beliefs. This could suggest that the test for the award of punitive damages should be different from that for other torts. In the *Dimplex v. CFM* case, Mosley J. wrote that the defendant's infringement "was a deliberate appropriation of intellectual property," and that the defendant's evidence that it attempted to design around the plaintiff's patent rather than copy the technology was "unconvincing."[142] Still, this did not rise to the "conduct of such high handed, callous and oppressive nature" needed to justify an award of punitive damages.[143] Punitive damages have never been awarded in the Federal Court simply because the defendant knowingly or intentionally infringed a patent.[144]

An award of punitive damages on the sole basis that the infringement was intentional would be cause for concern, because it could have a chilling effect on the defendant's ability to challenge a patent that the defendant believed to be invalid by entering the marketplace. An action to impeach the impugned patent in the Federal Court is available; however, such actions are expensive and time-consuming.[145] Unfortunately, the same factors that suggest a different test also make it difficult to design such a test. In the United States, treble damages are available to a plaintiff who can demonstrate "willful infringement."[146] This has generated considerable case law, uncertainty, and criticism.[147]

8.0. CONCLUSION

This article has sought to bring together relevant case law and accounting and business knowledge to organize and clarify these issues. A companion article, "Damages Calculations in Intellectual Property Cases in Canada,"[148] continues this analysis in the area of damages calculations.

APPENDIX: LIST OF SPECIFIC DEDUCTIONS BY CASE—PATENTS, ACCOUNTING OF PROFITS

Teledyne Industries Inc. v. Lido Industrial Products

- trial (1979), 45 C.P.R. (2d) 18 (F.C.T.D.)
- reference (1982), 68 C.P.R. (2d) 56 (F.C.T.D.—Prothonotary)
- reference aff'd. (1982), 68 C.P.R. (2d) 204 (F.C.T.D.)

Facts: Lido was found liable for selling shower heads that infringed Teledyne's patented spray nozzle. Lido ordered the shower heads pre-packaged from Hong Kong, and then sold and serviced them in Canada.

Revenues	$1,020,873.30	Agreed between the parties
Allowed deductions	$450,570.57	Product cost
	$6,737.76	Administrative overhead—only "bad debts" are considered variable and hence deductible
	$4,931.42	Variable sales costs, such as employee benefits, travel, advertising, printing, and general expenses
	$19,647.38 $24,191.33 $1,153.31	Finance expenses—interest on bank loans and interest payments made related to the importation and sale of the infringing product Sales commissions—only 50 percent of the claimed costs were allowed, because the other half were sold directly by Lido Freight costs—f.o.b. Toronto costs disallowed
	$1,466.71	Repair department costs—labour, supervision, shipping, freight on returned items, repair parts and supplies. Only part of the claimed amount was allowed as a deduction; the rest was fixed in nature. This amount was reduced from $9,733.91 on appeal to the trial division from the referee's report.
	$143.80	Co-operative advertising
Disallowed deductions	Legal fees	"Only fees that could conceivably be deducted as a proper expense would be any legal fees annually expended in the conduct of business of this product line. This, of course, would exclude lawsuits. … [T]he only expenses that can be properly deducted are the working expenses incurred in the process of earning income and that, as legal fees do not come within that definition" (68 C.P.R. (2d) 56, at 68 (F.C.T.D.—Prothonotary)).
	Mould costs	The defendant failed to prove that the moulds were actually used in making the infringing products. There was also some question regarding own ership of the moulds.
	Printing Costs	The printing costs were included in the price paid for the products and were already accounted for.
	Product cost of destroyed infringing products	"Did the expenditure actually contribute to the earning of the amounts realized by the defendant on the sale of the infringing shower heads? The answer to that is obviously no" (68 C.P.R. (2d) 204, at 218 (F.C.T.D., Addy J.)).
	Shipping costs	Allowed by referee, disallowed by trial judge
Total Award	$512,031.02	

Ductmate Industries Inc. v. Exanno Products Ltd.

- (1986), 13 C.P.R. (3d) 244 (F.C.T.D.—Prothonotary)
- var'd. (1987), 15 C.P.R. (3d) 244 (F.C.T.D.)
- and (1987), 16 C.P.R. (3d) 15 (F.C.T.D.)

Facts: Exanno was found at trial to be infringing Ductmate's patent for an offset. Exanno had a patent on a flange that was also part of the corner piece. In a second action, Ductmate was found to be infringing Exxano's patent.

Revenues	$107,606.00	Agreed between the parties
Disallowed deductions	Legal expenses	Expenses for this action were disallowed. However, the defendant also incurred legal expenses defend ing a separate patent it held that was incorporated into the corner piece. Since the profits from the plaintiff's and defendant's patented aspects of the corner piece could not be separated, the defendant was allowed to deduct the cost of defending its patent by Giles A.S.P. This was disallowed on appeal by Jerome A.C.J.
	Excess of pre-infringement expenses over pre-infringement revenues	The defendant failed to prove that the expenses were related to the later revenues-"It is quite possible that an expense which was booked in a prior period should really be applied against revenues in a later period to determine profits in that later period. Detail which could justify proper application of an individual item of expense was refused as irrelevant on discovery. It cannot now be introduced" (13 C.P.R. (3d) 193, at 202 (F.C.T.D., Giles A.S.P.)).
Total award	$107,606.00	

Rucker Co. et al. v. Gavel's Vulcanizing Ltd.

- (1987), 13 C.P.R. (3d) 385 (F.C.T.D.—Prothonotary)

Facts: Gavel's was found to be infringing Rucker's patent for a packing element used in blow-out preventers in oil wells. The plaintiffs elected an accounting of profits.

Revenues	$820,908	Agreed to by both parties
Allowed deductions	$88,668	Cost of materials
	$125,537.90	Labour costs
	$250.45	Air freight charge for which a receipt existed
	$6,300	Bad debts
	$9,723	Moulds and dies
	$2,325	Equipment
	$6,782.45	Failures (3 percent of materials, labour, and facto ry expense)
	$5,346	Accounting and office expenses
	$11,886	Factory expense
Disallowed deductions	Freight charges	The defendant did not adequately prove these costs.
	Interest charges on retained earnings	When using a differential accounting method, this deduction was inappropriate. Arguably, this amount is a net benefit received by the defendant.
Total award	$564,099.20	

Beloit Canada v. Valmet OY

- motion (1987), 16 C.P.R. (3d) 92 (F.C.A.)
- motion (1992), 45 C.P.R. (3d) 116 (F.C.A.)
- reference (1994), 55 C.P.R.(3d) 433 (F.C.T.D.)
- appeal of reference (1995), 61 C.P.R. (3d) 271 (F.C.A.)

Facts: Valmet OY was found to be infringing Beloit's patent for the press section of a paper-making machine. There were three live issues in the reference. First, Valmet argued that since the press section is only part of the paper-making machinery, Beloit should be limited to profits on the press section only; second, Beloit argued that Finnish government subsidies of Valmet should be included as part of the profit from the infringement; and third, the award of interest. In the reference, Rouleau J. simply referred to the agreed statement of issues filed by the parties, and did not examine the accounting details of the profit calculations. He limited Beloit's recovery to the press sections of the machines, and refused to grant profits from the Finnish government subsidies. The Federal Court of Appeal overturned the latter decision, and awarded the government subsidies to Beloit.

Profits	$2,864,700	Profits from press section only
	$42,900	Profits from change orders for four press sections
	$107,900	Profits from erection and start-up costs of press sections
	$144,000	Profits from the Finnish government's "K" subsidy
	$326,600	Profits from financing support form FECL, a Finnish government program
Total award	$3,486,100	

Diversified Products Corp. et al. v. Tye-Sil Corp. Ltd.

- (1990), 30 C.P.R. (3d) 324 (F.C.T.D.—Prothonotary)
- aff'd. (1990), 32 C.P.R. (3d) 385 (F.C.T.D.)

Facts: Tye-Sil was found to be infringing Diversified's patent for a convertible rowing machine. The plaintiffs elected an accounting of profits. The referee's report was unsuccessfully appealed.

Revenues	$5,102,256	Agreed to by both parties
Allowed eductions	$2,414,210	Material, warranty, scrap, shrinkage, and obsolesd-cence costs
	$397,982	Direct labour costs
	$216,056	Indirect costs—insurance, taxes, depreciation, advertising, shipping salaries and expenses, and express and cartage and truck expenses
	$12,366	Additional warehouse space required for infringing products

Hancor Inc. v. Les Systemes de Drainage Modernes Inc.

- (1990), unreported (F.C.T.D.—Prothonotary)
- aff'd. (1991), 38 C.P.R. (3d) 62 (F.C.T.D.)

Facts: Only the appeal from the reference is reported. The issues on appeal revolved around the weight given to the testimony of the expert witnesses, and the strict application by the referee of the differential accounting method. The appeal was dismissed.

	$20,000	Design expense—for designing owner manuals and pamphlets
	$50,000	Part of the salary of a salesman hired to sell in Quebec
Disallowed deductions	Absorption accounting method charges	
Total award	$1,991,642	

Reading & Bates Construction Co. et al. v. Baker Energy Resources Corp. et al.

- reference and appeal of reference to F.C.T.D. (1992), 44 C.P.R. (3d) 93 (F.C.T.D.)
- appeal to F.C.A. (1994), 58 C.P.R. (3d) 359 (F.C.A.)
- leave to appeal to S.C.C. refused [1995] 2 S.C.R. v

Facts: Both parties agreed that the profit derived from the infringing activity was $2,934,205. The questions to be decided were those of apportionment and pre-judgment interest.

Revenues	$479,133	Agreed to by both parties
Allowed Deductions	$150,649	Rawmaterial Direct labour costs Electricity use to manufacture infringing products
Disallowed deductions	Manager's salary	Interest on long-term debt
Total award	$328,439	

The Wellcome Foundation Limited and Glaxo Wellcome Inc. v. Apotex Inc.

- reference (1999), 82 C.P.R. (3d) 466 (F.C.T.D.)
- reference further reasons (1999), 87 C.P.R. (3d) 34 (F.C.T.D.)

Facts: Apotex was found to have imported and used an active ingredient in a drug that infringed Wellcome's patent. The plaintiff elected an accounting of profits. The reference did not determine a exact monetary figure; instead, it gave detailed instructions on the calculation of the figure. The reference has been appealed.

Revenues	$17,856,294	Agreed to by both parties
Allowed deductions		Material costs
		Labour and overhead costs
		Advertising and promotion
		Bad debts
		Freight out
		Salesmen's salaries and commissions
		Telephone, telegraph, and fax expenses
		Travel
		Sales discounts, if these were included in the revenues
Disallowed deductions	Absorption accounting method	
Total award		

Baker Petrolite Corp. v. Canwell Enviro-Industries Ltd.

- trial (2001) 13 C.P.R. (4th) 193 (F.C.T.D.)
- rev'd. on liability on appeal (2002), 17 C.P.R. (4th) 478 (F.C.A.)

Facts: At trial, Canwell and the City of Medicine Hat were found to have infringed a method and composition for reducing the hydrogen sulfide and organic sulfide levels in natural gas streams. The plaintiff elected an accounting of profits. The trial judge accepted the plaintiff's expert evidence and awarded $8,094,325.39 against Canwell and $621,421.07 against the City of Medicine Hat. In doing so, he disallowed deductions as listed below. In respect of bonuses paid to the sole proprietor of Canwell, Gibson J. noted that the amount of the bonuses paid was tied to tax considerations and not to "reasonable compensation to [the sole proprietor]," and disallowed the deduction.

On appeal, the patent was ruled invalid for anticipation. The Federal Court of Appeal did not discuss the accounting award.

Disallowed deductions		Depreciation
		Legal fees for the action itself
		Bonuses paid to sole proprietor
		Plant processing fees

ENDNOTES

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1 The *Patent Act*, R.S.C. 1985, c. P-4, s. 57(1)(b) provides specific statutory authority for an accounting of profits, but it has long been recognized that an accounting of profits is available as an equitable remedy in a patent action: see *Siddell v. Vickers* (1892), 9 R.P.C. 152, at 162 (C.A.), per Lindley L.J. discussing the origin of the remedy. The *Trade-marks Act*, R.S.C. 1985, c. T-13, s. 53.2 specifically permits "recovery of damages or profits," and the *Copyright Act*, R.S.C., 1985, c. C-42, s. 34 similarly provides that the copyright holder is entitled to a range of remedies including damages and accounts. The *Copyright Act* also contains a unique provision in s. 35 that permits a successful plaintiff to claim "in addition to those damages, such part of the profits that the infringer has made from the infringement and that were not taken into account in calculating the damages as the court considers just." This article does not deal with the unique issues surrounding this unusual provision.

2 Note that "damages" can be used as a generic term that refers to both an accounting of profits and compensatory damages. However, for the sake of clarity, this article will strive to use "damages" only in reference to compensatory damages.

3 Alexander J. Stack, A. Scott Davidson, and Stephen R. Cole, "Accounting of Profits Calculations in Intellectual Property Cases in Canada" (2001), 17 C.I.P.R. 405, at 439.

4 *Monsanto Canada Inc. v. Schmeiser*, 2004 SCC 34, [2004] 1 S.C.R. 902, (2004), 31 C.P.R. (4th) 161 ("*Schmeiser*"), part D, "Remedy," paras. 98-105.

5 *Teledyne Industries v. Lido Industrial Products, infra* note 22.

6 See, for example, *Schmeiser*, supra note 4, at para. 101 and citations.

7 To be complete, the Actual Profits approach also includes the concept of apportionment, discussed in section 4 of this article.

8 Preston J. (Prothonotary) in *Teledyne, infra* note 22, at para. 110, quoting *Levin Bros. v. Davis Mfg. Co.*, 72 F. 2d 163, at 165 (8th Cir. 1934).

9 In our 2001 article, supra note 3, we refer to this as the "comparative approach."

10 *Schmeiser, supra* note 4, at para. 102. Note that this is the judgment of the majority—five out of nine justices. The four justices in the minority did not address the accounting of profits remedy.

11 Not to be confused with differential costing, described below.

12 *Monsanto Canada v. Schmeiser* (2001), 12 C.P.R. (4th) 204, at para. 121 (F.C.T.D.); aff'd. (2002), 21 C.P.R. (4th) 1, at para. 78 (F.C.A.).

13 *Schmeiser, ibid.*, at para. 135 (F.C.T.D.); *Schmeiser, ibid.*, at para. 80 (F.C.A.).

14 *Supra* note 4, at para. 104.

15 N.V. Siebrasse, "A Remedial Benefit-Based Approach to the Innocent-User Problem in the Patenting of Higher Life Forms" (2004), 20 *C.I.P.R. 79*.

16 D.A. Aylen amd M.J. Graff, "The 'Differential Profit' Approach in Monsanto," in *Return of the Six Minute Intellectual Property Law Lawyer*, November 10, 2004 (Toronto: LSUC, 2004), 21-5 to 21-7; P.J. Wells, "Monetary Relief—Profits," in R. Dimock, ed., *IP Disputes: Resolutions and Remedies (Toronto: Thomson-Carswell*, 2002, 2007), 18-27 to 18-30.1.

17 There is a long line of appellate-level cases emphasizing that trial courts should not let precedent interfere with dealing with the cases before them as best they can. For example, Moulton L.J. in *Meters Ltd.*: "I am not going to say a word which will tie down future judges and prevent them from exercising their judgment, as best they can in all the circumstances of the case" (*Meters Ltd. v. Metropolitan Gas Meters Ltd.* (1911), 28 R.P.C. 157, at 165 (C.A.)). The issue after *Schmeiser* is not really whether trial courts still have considerable freedom to improvise; rather, it is only whether they must exercise that freedom within the framework of the Differential Profits approach.

18 See *infra* at note 61 and accompanying text; note 64 and accompanying text; note 67 and accompanying text; and note 103 and accompanying text.

19 *Celanese International v. BP Chemicals*, [1999] R.P.C. 203, at 242 (Pat. Ct.).

20 See also section 1.3 and the discussion on hindsight.

21 *Dart Industries v. Decor Corp.* (1993), 116 A.L.R. 385 (H. Ct. Aus.), per McHugh J. concurring, citing *Sheldon v. Metro-Goldwyn Corp.*, 106 F. 2d 45 (1st Cir. 1939); aff'd. 309 U.S. 390 (1940). For a concise discussion of the Dart judgment, see C. Oddie "Accounting for Profits in a Patent Infringement Action" (December 1983/January 1994), *Patent World* 30.

22 • *Teledyne Industries Inc. et al. v. Lido Industrial Products Ltd.* (1979), 45 C.P.R. (2d) 18 (F.C.T.D.); reference (1982), 68 C.P.R. (2d) 56 (F.C.T.D.—Prothonotary); aff'd. (1982), 68 C.P.R. (2d) 204 (F.C.T.D.) (infringing shower

heads)

- *Ductmate Industries Inc. v. Exanno Products Ltd.* (1987), 16 C.P.R. (3d) 15 (F.C.T.D.) (infringing offset on a flange)

- *Rucker Co. et al. v. Gavel's Vulcanizing Ltd.* (1987), 13 C.P.R. (3d) 385 (F.C.T.D.—Prothonotary) (infringing packing element for blow-out preventers)

- *Beloit Canada Ltée v. Valmet OY* (1994), 55 C.P.R. (3d) 433 (F.C.T.D.) (infringing press sections); (1995), 61 C.P.R. (3d) 271 (F.C.A.), var'g. (1994), 55 C.P.R. (3d) 433 (F.C.T.D.)

- *Diversified Products Corp. et al. v. Tye-Sil Corp. Ltd.* (1990), 32 C.P.R. (3d) 385 (F.C.T.D.) (infringing convertible rowing machines)

- *Hancor et al. v. Les Systèmes de Drainage Modernes Inc.* (1991), 38 C.P.R. (3d) 62 (F.C.T.D.) (infringing coupler for joining tubing)

- *Reading & Bates Construction Co. Ltd. v. Baker Energy Resources Co.* (1992), 44 C.P.R. (3d) 93 (F.C.T.D.) (infringing method of drilling)

- *Wellcome Foundation Ltd. et al. v. Apotex* (1999), 82 C.P.R. (3d) 466 (F.C.T.D.); further reasons (1999) 87 C.P.R. (3d) 34; aff'd. (2001) 11 C.P.R. (4th) 218 (F.C.A.) (infringing method of chemical production)

- *Baker Petrolite Corp. v. Canwell Enviro-Industries Ltd.* (2001), 13 C.P.R. (4th) 193 (F.C.T.D.); rev'd. on liability (2002), 17 C.P.R. (4th) 478 (F.C.A.) (invalid patent; method and composition for reducing the hydrogen sulfide and organic sulfide levels in natural gas streams)

23 *Reading & Bates Co. Ltd. v. Baker Energy Resources Co.* (1994), 58 C.P.R. (3d) 359, at 366-68 (F.C.A.); Teledyne, supra note 22, at 209 (F.C.T.D.).

24 *Collette v. Lasnier* (1887), 13 S.C.R. 563, cited in Schmeiser, *supra* note 4, at para. 102.

25 *Supra* note 4, at para. 101.

26 *Athey v. Leonati*, [1996] 3 S.C.R. 458, at para. 32 (emphasis added).

27 *Ibid.*, at paras. 12-13. Note that "original position" language arises from personal injury cases, where it is common to assume that, "but for" the injury, the plaintiff would have continued as just before the injury—hence, the "original position."

28 On the "but for" test as the standard test for causation, see *Athey, ibid.*, at para. 14 (general civil test); John G. Fleming, *The Law of Torts*, 9th ed. (North Ryde, N.S.W.: LBC Information Services, 1998), 219 ("enjoys almost universal acceptance"). The same test is used in the equitable remedy of compensation: see *Cadbury Schweppes Inc. v. F.B.I. Foods Ltd.*, [1999] 1 S.C.R. 142, (1999), 83 C.P.R. (3d) 289, at para. 48.

29 In the U.S. context, see *Tilghman v. Proctor*, 125 U.S. 136, at 146 (1888).

30 *Supra* note 4, at para. 102.

31 In *Mowry v. Whitney*, 81 U.S. 434 (1871), the decision that established the value-based Differential Profits approach in the United States, the U.S. Supreme Court stated that a comparison must be made with other processes "then open to the public." In *Gordon Form Lathe Co. v. Ford Motor Co.*, 133 F. 2d 487, at 495 (6th Cir. 1943); aff'd. 320 U.S. 714, the U.S. Sixth Circuit Court of Appeals applied this rule to hold that the defendant could not propose as an alternative an option that was unavailable to it because it was patented by a third party. As well as being a clear example of the application of the Differential Profits rule, *Gordon Form Lathe* has an excellent general discussion of the approach.

32 *Supra* note 24, at 576.

33 This rule was recently reaffirmed by the Supreme Court in *Hamilton v. Open Window Bakery*, [2004] 1 S.C.R. 303, at para. 11: "Generally speaking, where there are several ways in which the contract might be performed, that mode is adopted which is the least profitable to the plaintiff, and the least burdensome to the defendant," quoting *Cockburn v. Alexander* (1848), 6 C.B. 791, at 814.

If a defendant breaches a contract, a comparison is made between the actual position of the plaintiff and the hypothetical position the plaintiff would have been in had the contract been performed. In constructing the hypothetical position, it is presumed that the defendant would have acted in its own best interests and performed the contract in the manner most advantageous to it.

34 This is also consistent with the general law of equitable remedies. For example, like damages, the equitable remedy of compensation "attempts to restore to the plaintiff what has been lost as a result of the breach," but "[t]he plaintiff's actual loss as a consequence of the breach is to be assessed with the full benefit of hindsight." *Cadbury Schweppes*, *supra* note 28, at para. 64, quoting McLachlin J. in *Canson Enterprises Ltd. v. Boughton & Co.*, [1991] 3 S.C.R. 534. In general tort law, see Major J.'s discussion in *Athey v. Leonati*, *supra* note 26, at 31, of *Jobling v. Associated Dairies Ltd.*, [1981] 2 All E.R. 752, in which a plaintiff had suffered a back injury due to the negligence of the defendant. Damages were reduced because an unrelated spinal disease that developed after the time of the injury would have proved totally disabling within a few years. Thus, hindsight was used to determine that the plaintiff would have been disabled even but for the accident.

35 94 U.S. 695 (1897).

36 See *Gordon Form Lathe*, supra note 31, at 495.

37 See, for example, *Westinghouse Electric & Mfg. v. Wagner Electric & Mfg.*, 225 U.S. 604 (1912).

38 Generally, the plaintiff will be attempting to rebut the presumption in order

to receive a larger accounting of profits award. However, it is conceivable that a defendant could argue that on the facts it would have pursued a course other than the generally accepted "best" course of action and so realized surprisingly higher profits, reducing the size of the award.

39 *Kohler's Dictionary for Accountants*, 6th ed. (Englewood Cliffs, N.J.: Prentice Hall, 1983), 362-63.

40 As will be discussed later, the computations need to be consistent in their treatment of fixed and variable costs. For example, if the cost of renting warehouse space (a fixed cost) is apportioned by the floor space occupied by the various product lines in the actual profit computation, the same approach should be used in assessing the profit computation under the most likely alternative. When choosing the appropriate cost paradigm, the preferred approach would be the one that reveals the detailed differences between the two profit computations most transparently.

41 See the Federal Court of Appeal decision in *Reading & Bates*, *supra* note 22, at 367. See the trial-level decisions in *Ductmate Industries*, *supra* note 22; *Rucker Co.*, *supra* note 22; and *Diversified Products v. Tye-Sil*, *supra* note 22, at 389-91.

42 In some cases agreement was not reached until partway through the trial; in others the parties presented a schedule of agreed revenues for various possible liability decisions. See *Wellcome Foundation v. Apotex*, *supra* note 22. In *Baker Petrolite*, *supra* note 22, the main topic of contention was bonus payments, a cost.

43 In the damages context, see *Gerber Garment Technology v. Lectra Systems Ltd.*, [1997] R.P.C. 443, at 452 (C.A.), per Staughton L.J. and our accompanying article, Norman V. Siebrasse, Alexander J. Stack, and the Cole & Partners Financial Litigation Support Group, "Damages Calculations in Intellectual Property Cases in Canada" (forthcoming), *C.I.P.R.*, at section 1.1.2.

44 "Damages Calculations in Intellectual Property Cases in Canada," *supra* note 43, at section 1.1.2.

45 *Supra* note 22.

46 *Supra* note 22, at 281.

47 *Supra* note 21.

48 *Feldstein and Stork Craft v. McFarlane Gendron Mfg.* (1966), 52 C.P.R. 127, at 136-37, [1967] 1 Ex. C.R. 378, 34 Fox Pat. C. 113.

49 *Supra* note 22, at 283 (F.C.A.).

50 *Sheldon*, *supra* note 21, at 52.

51 *Beloit Canada v. Valmet OY* (1992), 45 C.P.R. (3d) 116, at 121 (F.C.A.).

52 *Sheldon*, *supra* note 21, at 52.

53 See *Toronto Auer Light Co. v. Colling* (1898), 31 O.R. 18 (Dist. Ct.) and *Diversified Products v. Consumers Distributing* (1992), 43 C.P.R. (3d) 520 (F.C.T.D.). For a similar result in a case involving passing off, see *Ray Plastics v. Canadian Tire* (1995), 62 C.P.R. (3d) 247 (Ont. Ct. Gen. Div.).

54 *Potton Ltd. v. Yorkclose Ltd.*, [1990] F.S.R. 11, at 15-16 (Ch. D.). This holding was obiter dicta, because Millett J. also found that the houses had actually been sold and the proceeds were realized profits. Similar reasoning was also approved in obiter dicta by the Federal Court of Australia in *Zupanovich Pty. v. B and N Beale Nominees* (1995), 32 I.P.R. 339, at 358 (Fed. Ct. Aust.).

55 *Athey*, *supra* note 26, at para. 27 (citations omitted).

56 In *Potton*, *supra* note 54, the inventory had been built which would give rise to a predictable profit when sold and there was a high likelihood that they would be sold. Hence, this profit was recognized.

57 See *Gerber Garment v. Lectra*, *supra* note 43, and *Cadbury Schweppes*, *supra* note 28.

58 For further discussion of springboard damages and early-adopter advantages, see "Damages Calculations in Intellectual Property Cases in Canada," *supra* note 43, at section 2.4.

59 *Schnadig Corp. v. Gaines Mfg. Co.*, 620 F. 2d 1166, at 1172 (6th Cir. 1980).

60 Figure 5 assumes that the infringer has made a greater profit through infringing than the infringer would have made under the most likely alternative. It also assumes that the proportion of fixed costs deducted under absorption costing is a greater sum in the actual position than in the most likely alternative.

61 See also the U.S. Sixth Circuit Court of Appeals in *Schnadig Corp.*, *supra* note 59, at 1172: "The ideal approach to resolving the conflicting considerations present here would be to ascertain whether without the infringement the defendant could have employed the facilities which were devoted to the infringing production in a manner which would have covered the fixed costs at issue. If no alternative use were available, the fixed costs sought to be allocated against the profits from the infringement would have been borne by the defendant's existing non-infringing production, and a recovery of those costs would in effect reduce the cost of his other production, resulting in a net gain from the infringement."

62 *Supra* note 21. Laddie J. in *Celanese*, *supra* note 19, at 236, also adopted the absorption approach to fixed costs.

63 *Dart*, *supra* note 21, at 389-90 (Mason C.J., Deane, Dawson, and Toohey JJ.). In a concurring judgment, McHugh J. held that the deduction of the opportunity cost was the theoretically correct approach to determining the account of profits.

64 *Ibid.*, at 398.

65 *Teledyne*, *supra* note 22, at 81 (F.C.T.D.—Prothonotary).

66 *Ibid.*, at 81. In *Levin Bros. v. Davis Mfg. Co.*, 72 F. 2d 163 (8th Cir. 1934), the court stated: "It often happens that overhead expenses are applicable to and should be spread over the entire business but where a business is established and in operation and another line is taken on without increase of overhead expenses it is just to the patentee that the actual situation be applied and none of such overhead be charged as an expense of the added line except as it participated in manufacture or sale of the infringing article."

67 *Teledyne*, *supra* note 22, at 213 (F.C.T.D.). This quotation summarizes a passage at page 210. Addy J. went on to reject cases concerned with damages that adopted the absorption accounting method as inapplicable in accounting of profits calculations.

68 See *Dubiner v. Cheerio Toys & Games* (1966), 49 C.P.R. 155 (Ex. Ct.).

69 See *Teledyne*, *supra* note 22.

70 See *Rucker*, *supra* note 22. Note that there is Australian case law to the effect that the costs of returned items cannot be deducted because the losses were not incurred in the making of a profit: "a sale resulting in a loss may not be offset by an infringer against another and independent sale resulting in a gain for the purpose of extinguishing or reducing a liability for profits." *Lepastrier & Co. Ltd. v. Armstrong-Holland Ltd.* (1926), 26 S.R. (N.S.W.) 585.

71 See *Hancor*, *supra* note 22.

72 See *Baker Petrolite*, *supra* note 22 (F.C.T.D.)

73 *Teledyne*, *supra* note 22, at 215; *Baker Petrolite*, *supra* note 22 (F.C.T.D.).

74 *Supra* note 22 (F.C.T.D.).

75 *Ibid.*, at para. 64, and see para. 65.

76 *Ibid.*

77 *Teledyne*, *supra* note 22, at 218 (F.C.T.D.). See also *Dubiner*, *supra* note 68, at 177.

78 See William Hayhurst, "Delivery Up and Other Remedies," in G.F. Henderson, ed., *Patent Law of Canada* (Toronto: Carswell, 1993), 307-8.

79 *Supra* note 22.

80 *Celanese*, *supra* note 19, at 239-40.

81 But see Joel A. Nitikman, "Taxability and Deductibility of Judgments and Awards," in *1991 British Columbia Tax Conference* (Toronto: Canadian Tax Foundation, 1991), tab 3, at 52-55; and Sharon J. Hugo and Alan L. Rautenberg,

"Damages and Settlements: Taxation of the Recipient" (1993), 41 *Can. Tax J.* 1, at 36-37.

82 *Celanese*, *supra* note 19, at 248-51.

83 In *Ductmate Industries v. Exanno Products* (1986), 13 C.P.R. (3d) 193 (F.C.T.D.—Associate Senior Prothonotary), the activities the money was borrowed to finance were subsequently ruled on appeal to be unrelated to the obtaining of profit, so the interest was automatically disallowed for that reason as well.

84 *Rucker*, *supra* note 22.

85 In *Ductmate*, *supra* note 83.

86 See figure 2 and accompanying description.

87 *Supra* note 3, at 428.

88 *United Horse-Shoe and Nail Co. v. Stewart & Co.* (1888), 5 R.P.C. 260 (H.L.).

89 *Beloit Canada Ltée v. Valmet OY*, *supra* note 22, at 456 (F.C.T.D.).

90 Rouleau J. was asked to choose between the plaintiff's submission (that it was entitled to all the profits on the paper-making machines) and that of the defendant (that the profits should be limited to sales of the press sections). As between the two submissions, the defendant's was undoubtedly closer to the value-based standard.

91 [1994] F.S.R. 567 (Full Ct. Aus.); aff'd. (1993), 116 A.L.R. 385 (H. Ct. Aus.).

92 *Ibid.*, at 580 (Full Ct. Aus.).

93 In arriving at this result, the Full Court cited and applied a passage from the decision of the High Court of Australia in *Colbeam v. Stock Affiliates Pty Ltd.* (1968), 122 C.L.R. 25, which states that when the whole thing is infringing, the whole profits should be accounted for. This reasoning is particularly inapposite in the *Dart* case because only a part of the thing infringed; apart from the "whole thing" rule being unsound in principle, it was of doubtful applicability on the facts. The result is justified much more directly by the Differential Profits approach.

94 *Wellcome Foundation*, *supra* note 22; *Celanese*, *supra* note 19.

95 Mackay J. rejected the Differential Profits approach as proposed by Apotex. The infringer proposed two alternative bases of comparison. First, the TMP was protected only on a product-by-process basis, and the infringer argued that non-infringing sources were available. Mackay J. rejected this argument on the basis that there was no evidence that product was available that Apotex knew or could have known was non-infringing. This is simply an application of the rule that the hypothetical alternative must be actually available to the defendant at the time of

infringement. The second hypothetical alternative proposed was that Apotex could have obtained a compulsory licence arising from the compulsory licensing scheme in effect at the time. It may not be inconsistent with the Differential Profits approach to hold that this did not constitute an alternative "open to the public" at the time of the infringement.

96 Obtaining an NOC is a necessary step; it indicates permission from the federal government to market the drug in Canada.

97 *Wellcome Foundation*, *supra* note 22, at 488 (F.C.T.D.).

98 *Celanese*, *supra* note 19, at 225 and 226.

99 *Ibid.*, at 232.

100 It should be noted that the plaintiffs actually claimed £180,000,000 as the profits from two infringing plants. However, Laddie J. also held that the second plant sold acetic acid at a loss.

101 *Teledyne*, *supra* note 22 (reference).

102 *Ibid.*, at 214 (1982 F.C.T.D.).

103 *Supra* note 83, at 198. Similarly, in *Dubiner*, *supra* note 68, at 179, a trademark infringement case where the plaintiff sought an accounting of profits, the referee "concluded that 20% of the profit realized by the defendant on its sales made in the accounting period was attributable to its use of those [infringing] trade marks." Noël J. of the Exchequer Court approved this apportionment upon appeal.

104 *Imperial Oil Limited et al. v. Lubrizol Corporation et al.* (1996), 71 C.P.R. (3d) 26 (F.C.A.).

105 *Ibid.*, at para. 10.

106 It appears that the defendant relied on the case of *Siddell v. Vickers*, *supra* note 1, to support this argument. However, Giles A.S.P. commented that it was unclear on what basis the amount eventually granted in *Siddell* was decided, so the case could not be used to support this argument.

107 Giles A.S.P. then took this unjustness into account when dealing with pre-judgment interest, although this was overturned by Reed J. on appeal because any "unfairness" should not affect the award of pre-judgment interest. This approach raises some interesting questions. Suppose that a defendant was able to make a strong case for apportionment, but was unable to prove the amount of the apportionment to the court. Giles A.S.P.'s decision implies that in such a case, he would have been willing to declare the absence of a proven quantum of apportionment as "shockingly unjust" and substitute a claim for a reasonable royalty for the account of profits, following the American case of *Stearns-Roger Mfg. Co. v. Ruth*, 87 F. 2d 35 (10th Cir. 1936).

108 *Celanese*, *supra* note 19, at 222, 230, and 231; *My Kinda Town v. Soll and Another*, [1983] R.P.C. 15, at 57 (Ch. D.).

109 *Supra* note 104, at para. 9.

110 *Teledyne*, *supra* note 22, at 226.

111 *Reading & Bates*, *supra* note 22, at 375.

112 In *Editions JCL Inc. v. 91439 Canada Ltée* (1994), 58 C.P.R. (3d) 38 (F.C.A.), a copyright case concerning an award for conversion, the court refused to overturn an award of only simple interest on the basis that the defendant acted in good faith.

113 *Reading & Bates*, *supra* note 22, at 374-75.

114 *Supra* note 22, at 286 (F.C.A.).

115 *Wellcome Foundation v. Apotex*, *supra* note 22, at para. 38 (further reasons).

116 See *Beloit Canada Ltd. v. Valmet-Dominion Inc.* (1997) 73 C.P.R. (3d) 321, 359-364 (F.C.A.); *Apotex Inc. v. Merck & Co.* (1996), 70 C.P.R. (3d) 183 (F.C.A.); *Bayer Aktiengesellschaft v. Apotex* (2002), 16 C.P.R. (4th) 417, at paras. 10-15 (Ont. C.A.).

117 See, for example, *J.M. Voith GmbH v. Beloit Corp.*, [1993] 2 F.C. 515 (T.D.), in which an accounting was denied because of delay in bringing action and because some of the defendant's infringing contracts had been entered into after the patent was declared invalid at trial; *Globe-Union Inc. v. Varta Batteries Ltd.* (1981), 57 C.P.R. (2d) 132; aff'd. on this point *sub nom. Johnson Controls v. Varta Batteries* (1984), 80 C.P.R. (2d) 1 (F.C.A.), in which a plaintiff who failed to disclose material facts at trial was denied an accounting.

118 (1995), 61 C.P.R. (3d) 417, at 444 (F.C.A.).

119 *Supra* note 24, at 576. See also *Laskowitz v. Marie Designer Inc.*, 119 F. Supp. 541, at 555 (S.D. Cal. 1954), decided after accounting had been abolished as a remedy in U.S. patent law, in which the district court noted that even though the infringer's profits per se could not be awarded, it was permissible to consider evidence as to those profits, since "the profits of the infringer may be the measure, when no other is adequate. … In ascertaining damages, the object has always been to approximate, as nearly as possible, the actual loss suffered by the patentee." On this view an accounting is appropriate when damages are difficult to establish—for example, where it appears that the plaintiff may have incurred real but difficult to quantify economic damage, such as a loss of business connections or a missed opportunity to develop an installed user base or take a company public in the software industry. Another example in which damages were arguably inadequate is a case such as *Reading & Bates*, *supra* note 22, which involved a large engineering project carried out by a patented process.

120 *Supra* note 22. The plaintiff would have refused to license because it bid on the project itself, and the unique nature of the project made it difficult to establish the plaintiff's lost profits. An accounting was sought and ordered in that case. Conversely, *Unilever v. Procter & Gamble* (1993), 47 C.P.R. (3d) 479, at 572 (F.C.T.D.) is an example of a case in which the trial judge declined to order an accounting of profits on the grounds that the patentee had bargained over the patent and had never made or practised the invention in Canada.

121 *Schmeiser*, *supra* note 4, at para. 101.

122 *Beloit v. Valmet OY*, *supra* note 51, at 118.

123 In *Unilever v. Procter & Gamble*, *supra* note 120, at 572, Muldoon J. of the Federal Court attempted to formulate a remedy that avoids thorny issues of discovery in damages by awarding a "generous, but non-confiscatory, rate of royalty."

124 See Wells, *supra* note 16, at s. 18.2(b).

125 *Tilghman v. Proctor*, *supra* note 29, at 145.

126 See, for example, *Baker Energy Resources v. Reading & Bates Construction* (1995), 58 C.P.R. (3d) 359, at para. 13 (F.C.A.): "It is trite to say that the exercise of this remedy has been associated with a number of practical difficulties which have somewhat diminished its usefulness," quoting Lindley L.J. in *Siddell v. Vickers*, *supra* note 1, at 162: "The Plaintiff therefore was perfectly within his right in electing, as he did in this case, to have an account of profits; but I do not know any form of account which is more difficult to work out than an account of profits."

127 See the discussion in *Aro Mfg. v. Convertible Top Replacement*, 377 U.S. 476, at 505 (1964); *Kori Corp. v. Wilco Marsh Buggies & Draglines*, 761 F. 2d 649, at 654 (Fed. Cir. 1985); S. Rep. No. 1503, 79th Cong., 2d Sess. (1946), reprinted in U.S. Code Congressional Service (1946), at 1386-87.

128 It is difficult to say whether shifting the focus of the inquiry will generally produce more or fewer motions in respect of discovery. Perhaps the greatest difference is that, in an accounting of profits, the plaintiff may have to explore several possible sources of revenue (that is, convoyed goods) through discovery before crystallizing its case, whereas in damages the defendant only has to have discovery on issues pertinent to the plaintiff's already outlined case.

129 *AlliedSignal Inc. v. Du Pont Canada Inc. et al.* (1998), 78 C.P.R. (3d) 129 (F.C.T.D.); *Wellcome Foundation v. Apotex*, *supra* note 22.

130 See *Scientific Games v. Pollard Banknotes Ltd.* (1997), 76 C.P.R. (3d) 22, at 33 (F.C.T.D.).

131 *Beloit v. Valmet OY*, *supra* note 22, at 444 .

132 *Feldstein and Stork Craft*, *supra* note 48, at 134: “It is well settled that a patentee may choose his course of measuring his loss either by the profits which the infringer made, or by items of damages such as those referred to, but that in respect of the same matter he cannot have both his own damages and the infringer’s profits.” See also *3925928 Manitoba v. 101029530 Saskatchewan (2006), 44 C.P.R.* (4th) 161, at para. 15 (F.C.T.D.). This was a trade-marks case and Snider J. also relied on the wording of the *Trade-marks* Act on this point, but the principle against double recovery is a general one.

133 See C. Kirby, “Accounting of Profits: The Canadian Approach” (1993), 7 I.P.J. 263, at 271; D. Vaver, “Civil Liability for Taking or Using Trade Secrets in Canada” (1981), 5(3) *Can. Bus. L.J.* 253, at 297-300; D. Vaver, “What’s Mine Is Not Yours: Commercial Appropriation of Personality Under the Privacy Acts of British Columbia, Manitoba and Saskatchewan” (1981), 15(2) U.B.C. Law Rev. 241, at 322-23; S.M. Waddams, *The Law of Damages*, 2d ed. (Aurora, ON: Canada Law Book, 1991), 5-40 and 5-41; and H.G. Fox, *The Canadian Law of Copyright and Design*, 2d ed. (Toronto: Carswell, 1967), 471.

134 See *Spalding v. Gamage* (1915), 32 R.P.C. 273 (H.L.); (1918), 35 R.P.C. 101, at 122 (C.A.) and *Richardson v. Reed* (1988), 21 C.P.R. (3d) 275 (Ont. H.C.); cf. *3925928 Manitoba*, *supra* note 132, in which an accounting was ordered and the trial judge rejected damages for harm to reputation. Although the judge expressed skepticism at the propriety of ordering both an accounting and damages for loss of reputation—“While a party may plead both equitable and legal remedies, it should receive only one remedy in judgment as each remedy purports to sufficiently redress the wrong”—the claim for harm to reputation failed for lack of evidence. The two harms are distinct, so the second basis is to be preferred.

135 *Copyright Act*, *supra* note 1, s. 35(1).

136 *Watson Laidlaw Co. v. Pott, Cassells and Williamson* (1914), 31 R.P.C. 104, at 117 (H.L.), per Lord Shaw: “In the second place, it appears to me that, although it be true that a patentee cannot have both remedies at the same time, namely, the damages to his own business and the profits of the infringer’s business, still …”

137 For more on this point, see “Damages Calculations in Canadian Intellectual Property Cases,” *supra* note 43, at section 3.7 (on restitution versus compensation).

138 *Schmeiser*, *supra* note 4, at para.. 101; *Beloit v. Valmet OY*, *supra* note 22, at 455.

139 For example, in *Schmeiser*, where the damages award would have been greater than the accounting of profits awarded, see N. Siebrasse, “Patent Use, Intent and Remedy in Light of *Monsanto v Schmeiser*” (2005), 22(1) C.I.P.R. 453-94.

140 *Supra* note 132 at para. 28. Snider J. went on to find that in any event punitive damages were not appropriate on the merits.

141 Damages and an accounting of profits are non-punitive in nature because they apply to the most innocent infringer as well as to the most egregious. If the basic remedy were punitive in its nature, the innocent infringer would suffer a punitive punishment.

142 *Dimplex North America Ltd. v. CFM Corporation*, 2006 FC 586, at paras. 131 and 132.

143 *Ibid.*, at para. 132. In his analysis, Mosley J. cited *Lubrizol Corp. v. Imperial Oil Ltd.* (1996) 67 C.P.R. (3d) 1, at 21 (F.C.A.); *Whiten v. Pilot Insurance Co.*, [2002] 1 S.C.R. 595; and *Performance Industries Ltd. v. Sylvan Lake Golf and Tennis Club*, [2002] 1 S.C.R. 687, at para. 79.

144 *Ibid.*, at para. 123

145 *Patent Act*, *supra* note 1, s. 60(1).

146 U.S. Code Title 35 section 284.

147 For example, see United States Federal Trade Commission, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy*, October 2003 (available at http://www.ftc.gov/os/2003/10/innovationrpt.pdf), at 28-32. The report recommends that the U.S. Patent Act be amended so that treble damages are only available "when the patentee gives written notice or the infringer deliberately and knowingly copies a patented invention" (at 32).

148 *Supra* note 43.