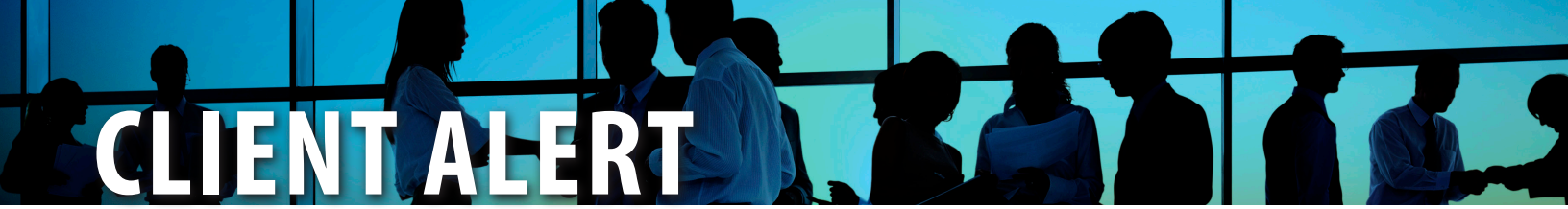


CANADIAN PATENT INFRINGEMENT: THE ROLE OF NON-INFRINGING OPTIONS IN PROFIT CALCULATIONS AND THE AVAILABILITY OF SPRINGBOARD PROFITS

by Yuri Chumak and Matthew Powell

The Supreme Court of Canada recently clarified the role of non-infringing options as well as springboard profits when calculating profits in patent infringement cases.

In *Nova Chemicals Corp v Dow Chemical Co,* 2022 SCC 43 (*"Nova"*), the Supreme Court reviewed a trial court's calculation of the profits gained by Nova Chemicals from infringing Dow Chemical's patent. A majority of the Supreme Court upheld the calculation of approximately $650 million, refusing to reduce the calculation based on the infringer's proposed non-infringing option, which the majority deemed irrelevant.

The majority of the court also confirmed that the calculation properly included profits gained after the patent expired, known as springboard profits. The majority found that 1) whether there is a relevant non-infringing option and 2) whether post-patent-expiry profits are causally attributable to patent infringement are both questions of fact reviewable on a standard of palpable and overriding error.

Holders of Canadian patents should be greatly interested to know that post-expiry profits are not automatically excluded from a disgorgement of profit calculation and are, in fact, included when causally linked to pre-expiry infringement.

One member of the Supreme Court dissented, in part, on the question of appropriate deductions. Cote J. would have reduced the award of profits by allowing deductions for the costs of the infringer's proposed "best non-infringing option." Cote J. would also have remitted the calculation of profits back to the trial court. Cote J. did, however, confirm the availability of springboard profits.

Background

Dow received a patent in 2006 that was directed to a new kind of ethylene-based plastic that, while thin, is quite strong. The patented plastic has been used extensively in garbage bags and food coverings. The patent expired in 2014.

During the term of the patent, Nova Chemicals developed and sold plastics covered by Dow's patent. When Dow sued Nova Chemicals in Federal Court for patent infringement, Nova Chemicals put up several defenses, including allegations of invalidity on several grounds. Despite this, the Federal Court upheld the patent's validity and found that Nova Chemicals had infringed. As a result of this decision, Dow was permitted to choose a remedy for the infringement in the form of disgorgement based on an accounting of Nova Chemical's profits.

During proceedings before the Federal Court concerning the quantum of profits, Nova Chemicals proposed that it was entitled to subtract the market value of ethylene from its profits. As Nova Chemicals had not actually purchased ethylene at market rates, but had in fact manufactured its own ethylene at below-market costs, the reference judge refused the deduction Nova Chemicals had proposed, but did accept a deduction of Nova Chemical's full actual costs of manufacturing ethylene.

For its part, Dow argued that some of the profits gained by Nova Chemicals after the patent expired were causally attributable to infringement occurring before the expiry. The reference judge agreed and established a quantum of profits award.

Nova Chemicals appealed this quantum of profits decision to the Federal Court of Appeal, arguing that there should, in fact, be deductions from its profits based on the market value of ethylene. This, Nova Chemicals argued, is because Nova had foregone selling, at market rates, the non-patented ethylene it made in lieu of using that ethylene in the plastic covered by the patent. Nova Chemicals also argued that springboard profits were not permitted under Canadian law.

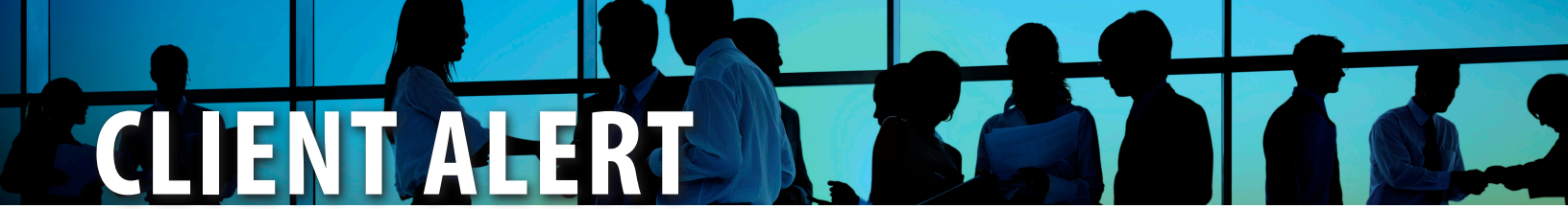
The Federal Court of Appeal rejected Nova Chemical's market-price deduction argument and upheld the Federal Court's decision regarding the availability of causally-attributable, post-expiry, springboard profits. Nova Chemicals appealed to the Supreme Court of Canada on both points.

The Role of Non-Infringing Options

Writing for the majority of the Supreme Court, Rowe J. adopted a new framework for assessment of an accounting of profits:

- Step 1: Calculate the profits earned by selling the infringing product — i.e., revenue minus (full or differential) costs.
- Step 2: Determine whether a non-infringing option can help isolate the profits causally attributable to the invention from the portion of the infringer's profits *not* causally attributable to the invention — i.e., differential profits. It is at this step that judges should apply the principles of causation. Causation "need not be determined by scientific precision: it is 'essentially a practical question of fact which can best be answered by ordinary common sense'."
- Step 3: If there is a non-infringing option, subtract the profits the infringer could have made had it used the non-infringing option from its actual profits to determine the amount to be disgorged.[i]

At the appeal, Nova Chemicals had argued that, had it not manufactured the patented product, it would have used its manufacturing capacity to make and sell a different product, referred to in *Nova* as "pail and crate plastics."[ii] The sales of such pail and crate plastics, Nova Chemicals argued, would have generated profits that should be deductible from the profits earned by infringing.



To deal with Nova Chemicals' arguments, Rowe J. focused the analysis on Step 2, leaving open the question of whether differential costs or full costs is the preferred method for calculating an infringer's costs in Step 1. It should be appreciated that the full costs approach allows infringers to also deduct a portion of the indirect expenses incurred to make the infringing product.

Nova Chemicals submitted that an infringer's "best non-infringing option" is synonymous with the infringer's "most profitable" alternative option. Cote J. adopted this same view in dissent. However, the majority held that to deter infringement, the non-infringing option review must be viewed in the context of isolating profits actually attributable to the unauthorized use of the patentee's invention. According to Rowe J., writing for the majority, non-infringing options help courts determine when some, but not all, of the infringer's profits, are causally attributable to the invention.

Rowe J. stated:

> If an infringer is allowed to use any prior profitable business venture as a non-infringing option, an infringer would always be incentivized to switch its business capacity to a more profitable infringing product. At worst, the infringer would keep all the profits they would have earned selling the non-infringing products that they sold before. At best, the infringer keeps some or all of the extra profits earned from infringement. Reading "non-infringing option" as Nova Chemicals suggests would have the effect of creating a form of business insurance for infringers: an infringer could always use their previous product lines as a non-infringing option and protect those profits in the event their new product infringes a patent.[iii]

Rowe J. also stated that

> …the non-infringing option need not be a strict market substitute for the patented product. The onus is on the infringer to adduce sufficient evidence to satisfy the court that the profits from its infringing product arose by virtue of features other than the patentee's invention and that there is a non-infringing option that can help the courts isolate this value…Typically, non-infringing options will be most relevant when a patent covers only part of the product sold. In those situations, the profits generated by the sale of the infringing product may be attributable to inventive and non-inventive features of the product. But non-infringing options may also be relevant when the entire product sold is patented.[iv]

In applying the law, Rowe J. observed that "*…Dow's invention had created a distinct market and Nova [Chemicals] could only service that market because it sold infringing plastics.*"[v] Moreover, "*…Nova [Chemicals] did not establish that there were relevant non-infringing options that would help the court isolate the profits causally attributable to Dow's invention from profits attributable to non-inventive features of the infringing product.*"[vi] In fact, Nova Chemicals conceded at trial that it was not seeking to deduct profits on foregone plastics. Rowe J. held that whether there is a relevant noninfringing option that can assist the court in its calculation is a question of fact[vii] and Nova Chemicals failed to discharge its evidentiary onus to establish this fact.[viii]

Springboard Profits

For the first time in Canadian legal history, the Federal Court decided to award springboard profits, which are profits accrued post-expiry due to infringement. This decision was later confirmed by both the Federal Court of Appeal and the Supreme Court of Canada.

At the Supreme Court, Nova Chemicals challenged the lower courts' decisions to award springboard profits. In doing so, Nova Chemicals argued that springboard profits are not legally permissible. However, according to Rowe J.:

> An infringer that begins selling the patented invention before the patent expires interferes with the patentee's right to build sales capacity and market share in the absence of competition. This can reduce the patentee's post-patent-expiry profits. If the patentee can prove that it lost sales post-patent-expiry as a result of infringing activity occurring during the life of the patent, the patentee is entitled to springboard damages to compensate for that loss.[ix]

Row J. continued:

> A corresponding purpose underlies an accounting of profits. By infringing during the life of the patent, the infringer can also build sales capacity and market share for their own version of the patented product. Then, after the patent expires, the infringer can use this sales capacity and market share to earn profits that it would not have earned but for the infringing activity that occurred during the life of the patent. Thus, a portion of such post-expiry profits may be causally attributable to infringement of the invention. Failing to disgorge those profits would leave gains that are causally attributable to infringement of the invention in the hands of the infringer. It would also be unfair to third parties that waited for patent expiry to compete with the patentee.[x]

Cote J.'s Dissent

Although Cote J.'s dissent could be regarded as more sympathetic to would-be infringers, in our view, it offered an alternative process that is more objective and less deferential to trial judges. To start, Cote J. agreed that an accounting of profits in a patent infringement case is indeed a remedy that requires the infringer to disgorge any profits gained from the infringement. According to Cote J., however, the focus of this remedy is on the profits that are causally attributed to the infringement, which should be determined

using a "but for" causation.[xi] The primary purpose of accounting profits in such a context is to restore the wrongdoer to the position they would have been in if they had not committed the wrongdoing.[xii] According to Cote J., the preferred approach in this context is the "differential profits" approach, which compares the actual profits earned by the infringer to the profits they could have and would have earned if they had not infringed the patent.[xiii] This approach aims to isolate the patent's value in the hands of the infringer and capture all potential profits that the infringer may have gained from violating the patentee's statutory monopoly.

According to Cote J., "*…a non-infringing option does not have to be a true consumer substitute for the patented product…*"[xv] and the option's value should be based on the actual difference in profitability than any subjective assessment of the value of the invention. In determining the profits to be disgorged, Cote J. argued that the court should consider any evidence that may help determine the patent's value in the infringer's hands,[xvi] including evidence of the infringer's expectations and business plans.

Conclusion

The Supreme Court has sent a clear message of deterrence to infringers of Canadian patents. Making, using, or selling a patented product in Canada without a license exposes an accused party to significant profit disgorgement, potentially now including profits gained after patent expiry. Not all deductions are necessarily acceptable when calculating profits, such as hypothetical profits of an irrelevant non-infringing option. The Supreme Court left the question of whether indirect costs are proper deductions open.

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[i] *Nova*, Para. [15]
[ii] *ibid*, Para [38]
[iii] *ibid*, Para [62]
[iv] *ibid*, Para [67]
[v] *ibid*, Para [69]
[vi] *ibid*, Para [70]
[vii] *ibid*, Para [67]
[viii] *ibid*, Para [70]
[ix] *ibid*, Para [80]
[x] *ibid*, Para [81]
[xi] *ibid*, Para [138]
[xii] *ibid*, Para [141]
[xiii] *ibid*, Para [161]
[xiv] *ibid*, Para [162]
[xv] *ibid*, Para [186]
[xvi] *ibid*, Para [173]