

File Number: 39439
(A-150-17/A-227-17)

IN THE SUPREME COURT OF CANADA
(ON APPEAL FROM THE FEDERAL COURT OF APPEAL)

BETWEEN:

NOVA CHEMICALS CORPORATION

Appellant

and

**THE DOW CHEMICAL COMPANY,
DOW GLOBAL TECHNOLOGIES INC. and
DOW CHEMICALS CANADA ULC**

Respondents

FACTUM OF THE RESPONDENTS
THE DOW CHEMICAL COMPANY et al.
(Pursuant to Rule 42 of the *Rules of the Supreme Court of Canada*)

SMART & BIGGAR LLP
55 Metcalfe St., Suite 900
P.O. Box 2999, Station "D"
Ottawa, Ontario K1P 5Y6

Steven B. Garland
sbgarland@smartbiggar.ca

Jeremy E. Want
jwwant@smartbiggar.ca

Daniel S. Davies
dsdavies@smartbiggar.ca

Telephone: (613) 232-2486
Facsimile: (613) 232-8440

Counsel for the Respondents

SMART & BIGGAR LLP
55 Metcalfe St., Suite 900
P.O. Box 2999, Station "D"
Ottawa, Ontario K1P 5Y6

Steven B. Garland
sbgarland@smartbiggar.ca

Telephone: (613) 232-2486
Facsimile: (613) 232-8440

Agent for the Respondents

ORIGINAL TO: **THE REGISTRAR**
Supreme Court of Canada
301 Wellington Street
Ottawa, ON K1A 0J1

COPIES TO:

Torys LLP
79 Wellington Street, Suite 3000
Box 270, TD Centre
Toronto ON M5K 1N2

Shelia R. Block
Tel: (416) 865-7319
sblock@torys.com

Andrew Bernstein
Tel: 416.865.8245
abernstein@torys.com

Nicole Mantini
Tel: (416) 865-7970
nmantini@torys.com

Jonathan Silver
Tel: 416.865.8198
jsilver@torys.com

Fax: (416) 865-7380

Counsel for the Appellant

Supreme Advocacy LLP
340 Gilmour Street, Suite 100
Ottawa, ON K2P 0R3
Fax: 613.695.8580

Marie-France Major
Tel: 613.695.8855
mfmajor@supremeadvocacy.ca

Agent for Counsel of the Appellant

TABLE OF CONTENTS

I – OVERVIEW & FACTS	1
A. Overview.....	1
(i) Nova’s proposed deduction of a hypothetical “ethylene profit”	1
(ii) Springboard profits	5
B. Background.....	6
(i) Parties	6
(ii) The Invention of the 705 Patent	7
(iii) Market for the patented products.....	7
(iv) Liability judgment	8
(v) U.S. proceedings.....	8
C. The Reference Trial and Judgment.....	9
(i) Nova conceded that it had no non-infringing alternatives and could not seek differential profits as per <i>Schmeiser</i>	9
(ii) Nova’s claimed “market price” deduction for ethylene and its alternative request for full cost accounting for its ethylene production costs	10
(iii) The trial judge accounted for Nova’s hypothetical sales of Commodity Pail and Crate by awarding full cost accounting on SURPASS production.....	10
(iv) Springboard	12
D. FCA Judgment	13
(i) Overarching principles of the accounting of profits remedy.....	13
(ii) The FCA majority decision is not a novel approach	15
(iii) Nova’s claimed “market price” deduction for ethylene	16
(iv) Springboard	17
II – ISSUES	17
III – ARGUMENT	18
A. Standard of Review.....	18
B. Law	19
(i) Purposes of the <i>Patent Act</i> and the accounting of profits remedy.....	19
(ii) Nova’s proposed new approach to accountings of profits.....	20
(iii) Cost deductions	23
(iv) The “ <i>Schmeiser</i> ” differential profits approach and NIAs.....	24
(v) Nova adopted the same interpretation of <i>Schmeiser</i> for which it now criticizes the FCA	27

(vi) The value-based apportionment approach.....	27
(vii) Differential profits in the U.S.....	29
C. Nova’s Claimed Deduction of an Artificial “Market Price” of Ethylene Should be Denied	30
(i) Dissent of Woods J.....	34
D. No Error in Award of Springboard Profits	35
IV – SUBMISSIONS REGARDING COSTS.....	39
V – ORDER SOUGHT	39
VI – SUBMISSIONS ON CONFIDENTIAL INFORMATION.....	39
VII – TABLE OF AUTHORITIES	40

I – OVERVIEW & FACTS

A. Overview

1. Nova infringed Dow’s patent-in-suit for nearly a decade, reaping hundreds of millions of dollars in unlawful profits. Having been ordered to disgorge those profits, Nova seeks to retain a significant proportion of them by: (a) deducting a much higher, hypothetical and unproven cost for a raw material, ethylene, than the cost Nova actually incurred, by attempting to recast it as an “ethylene profit,” and (b) asking this Court to reverse the disgorgement of certain post-patent-expiry profits that were found as a fact, and admitted by Nova, to have causally flowed from Nova’s pre-expiry infringement (“springboard profits”). Both claims should be rejected.

(i) Nova’s proposed deduction of a hypothetical “ethylene profit”

2. Nova manufactures the ethylene raw material in its own facilities at low cost. Nevertheless, in the proceedings below, Nova sought to deduct a hypothetical (and much higher) “market price” for ethylene from its revenues when calculating its SURPASS profits. The courts below rightfully rejected that argument. Allowing Nova to deduct higher ethylene costs than it actually incurred, now in the guise of a hypothetical and unproven “ethylene profit,” would be an unprecedented and revolutionary departure from the established accounting of profits methodology, which is based on **actual** profits and **actual** costs.

3. Nova, in making this novel proposition, attempts to rely upon this Court’s decision in *Schmeiser*, which established the availability, if appropriate, of a “differential profits” approach of comparing a defendant’s infringing profits to the next best non-infringing alternative.¹ Nova’s attempt to deduct its alleged “ethylene profits” based on *Schmeiser* fails on both on the law and facts.

4. The proposed “ethylene profits” deduction is a misnomer. Nova does not contend that it could have sold even a single additional pound of **ethylene** to generate any “**ethylene profit**”—there was no such finding (and indeed as noted by the FCA, there was evidence to the contrary). Instead, Nova’s claimed deduction of so-called “ethylene profits” is actually based on hypothetical

¹ *Monsanto Canada Inc v Schmeiser*, 2004 SCC 34 [*Schmeiser*].

profits Nova claims it would have made, had it not infringed, by selling non-infringing *polyethylene* products, such as commodity “pail and crate” high-density polyethylene (“Commodity Pail and Crate”).

5. However, *Schmeiser* does not allow a deduction from infringing profits of the kind Nova seeks because Nova’s so-called “ethylene profit” arises from hypothetical sales of its Commodity Pail and Crate products that Nova admits are **not non-infringing alternatives that could be sold as substitutes for its infringing SURPASS**. Yet Nova seeks to retain “ethylene profit” based on an alleged “market price” for ethylene that it says it would have recovered via those sales.

6. Nova’s submissions mischaracterize this Court’s *Schmeiser* decision. *Schmeiser* confirmed the availability in Canada of the “differential profits” approach to an accounting of profits. Under this approach, a defendant must disgorge profits equal to the difference between a defendant’s profits from infringement and the profits it could have made using the “next best non-infringing option.” But this approach is used if and only if the infringer establishes that there was a true “non-infringing option” available to it, i.e., **a non-infringing alternative product or method that customers or users would accept as a substitute for the invention**. Limiting profits awards to the differential between the invention and, if available, a non-infringing alternative **that could have substituted therefor** isolates (and awards to the patentee) no more than the invention’s true value, which is the stated purpose of *Schmeiser*’s approach. This approach was applied in *Schmeiser*, in *Collette* upon which *Schmeiser* relied, and in every subsequent case applying *Schmeiser*, including by the majority of the Federal Court of Appeal in this case.² Nova cannot point to any tension or inconsistency in the jurisprudence on how to apply *Schmeiser*.

7. In contrast, Nova now proposes departing from *Schmeiser* by allowing infringers to deduct hypothetical profits from virtually anything they could plausibly argue they could have done with their time, materials, and/or other resources instead of infringing. Nova’s novel approach is

² *Collette v Lasnier*, [1886] 13 SCR 563 at 576 [*Collette*]. See for example: *Apotex Inc v Merck & Co*, 2015 FCA 171 at para 73 [*Merck*], leave to appeal to SCC refused, 36655 (14 April 2016); *Apotex Inc v Eli Lilly and Company*, 2018 FCA 217 at para 54 [*Eli Lilly*], leave to appeal to SCC refused, 38485 (14 April 2016); *Apotex Inc v ADIR*, 2020 FCA 60 at para 40 [*ADIR #2*], leave to appeal to SCC refused, 39172 (24 September 2020); Reasons of the Federal Court of Appeal, 2020 FCA 141 at paras 96-97, Appellant’s Record [AR], Vol. I, Tab 5, pp. 217-218 [*FCA Reasons*].

completely untethered from the invention and any attempt to isolate its value, would not deter infringement, and would render the accounting of profits remedy unable to effectively protect patentees' exclusive rights. Nova's approach is unsupported by any existing law and is contrary to Parliament's intent in enshrining the accounting remedy in the *Patent Act*. It should not be adopted.

8. Prior to this appeal, Nova consistently acknowledged that *Schmeiser's* differential profits approach **cannot** apply on the facts of this case. Indeed, before the Federal Court and Federal Court of Appeal, Nova **conceded** both that *Schmeiser's* differential profits approach was "not appropriate"³ because it had no non-infringing alternative and that it was not entitled to deduct hypothetical profits from hypothetical sales of low-grade polyethylene, such as its conventional Commodity Pail and Crate.⁴

9. Nevertheless, in this Court, Nova now argues its novel and expanded differential profits approach has been supported by *Schmeiser* all along, in direct contradiction to its prior submissions, and **relies on and seeks to withhold a portion of its infringing profits based on the very same alleged profits** from its Commodity Pail and Crate (calling them "ethylene profits" equal to an unproven "market price" for ethylene)⁵ Nova cannot, on appeal, walk back unequivocal concessions it made at trial and that the trial judge relied on in rendering his decision.⁶

10. Nova also argued below that its inflated ethylene deduction should be permitted as a form of "apportionment."⁷ This argument too was correctly rejected because no matter how Nova seeks to frame the argument, the law only permits deductions for costs that were actually incurred,⁸ and Nova did not pay a "market price" for the ethylene used in its SURPASS product.

³ Reasons of the Federal Court, [2017 FC 350](#) at para 146, AR, Vol. I, Tab 1, p. 56 [*FC Reasons*]; *FCA Reasons* at para 97, AR, Vol. I, Tab 5, p. 218; Extract from Nova's Factum (Responding to Cross-Appeal) dated Jan 29, 2018 (File No. A-150-17) [CONF] at para 29, Respondents' Record ("RR"), Tab 17 [Nova's Responding Factum on Cross-Appeal].

⁴ Volume 1 of the Expert Report of Mr. Errol Soriano dated Sep 26, 2016 (Trial Exhibit DR246A) [CONF] at para 127, RR, Tab 11 [Soriano Report].

⁵ Factum of the Appellant at paras 112-114, 134(c). Nova referred to these as "Foregone Alternative Products" in the lower court.

⁶ *FC Reasons* at para 146, AR, Vol. I, Tab 1, p. 56.

⁷ *FCA Reasons* at para 90, AR, Vol. I, Tab 5, p. 216.

⁸ See, for example: *Rivett v Monsanto Canada Inc*, [2010 FCA 207](#) at paras 92-94; *Monsanto v Janssens*, [2009 FC 318](#) at para 52; *FCA Reasons* at paras 94-95, AR, Vol. I, Tab 5, p. 217.

11. In particular, “apportionment” does not apply to the facts of this case, as held by both Fothergill J. (the “trial judge”) and the majority of the FCA, because there is nothing to apportion. If a product has both patented and non-patented components, the law of “apportionment” requires a defendant to only disgorge the profits from the sale of that product for which the patented invention **drove market demand**. But Dow’s patent covers a new and innovative product, and Nova’s infringing SURPASS is the patented product. Ethylene does not drive market demand for SURPASS; it is merely a raw material used to make SURPASS. In **undisputed** factual findings, the lower courts found that Nova’s customers bought SURPASS solely for its superior **polyethylene** properties resulting from the patented invention, not because of the ethylene used.⁹ Both SURPASS and Dow’s ELITE are mLLDPE products (a particular type of linear low-density polyethylene) that compete in a specialized market,¹⁰ and the trial judge held that SURPASS’s and ELITE’s commercial success arose from the combination of improved strength properties and good processability provided by the patented invention. The profits that Nova was ordered to disgorge were found **as a fact** by the trial judge to have been derived **solely** from the use of the patented invention via Nova’s sales of its infringing SURPASS product to customers.¹¹

12. Moreover, even if the law permitted an infringer to deduct hypothetical profits from products that are not non-infringing alternatives to the patented invention (which it does not), Nova’s argument would still fail on the facts. The trial judge made no finding of what profit (if any) that Nova would have made from sales of the Commodity Pail and Crate that Nova claims it would have sold had it not infringed, nor did the trial judge find that Nova would have recovered its alleged ethylene “market price” by selling Commodity Pail and Crate.¹² While the trial judge did find that Nova would have covered its non-incremental fixed costs with its Commodity Pail and Crate (and awarded Nova “full cost” accounting in consequence), he made no finding that those sales would have been profitable (or sufficiently profitable to cover Nova’s alleged “market price”).¹³ Indeed, Nova admitted at trial that quantifying any hypothetical Commodity Pail and

⁹ *FCA Reasons* at para 105, AR, Vol. I, Tab 5, p. 220.

¹⁰ *FC Reasons* at paras 15, 70-73, AR, Vol. I, Tab 1, pp. 6, 32-33.

¹¹ *FC Reasons* at paras 108, 140, 165, AR, Vol. I, Tab 1, pp. 43, 55, 63-64.

¹² Factum of the Appellant at para 5.

¹³ *FC Reasons* at paras 139-165, AR, Vol. I, Tab 1, pp. 55-64.

Crate profits would be “impossible.”¹⁴

13. Further, Nova already benefitted from its claimed alternative hypothetical sales of Pail and Crate through the trial judge’s allowance of “full cost” accounting (all incremental costs plus a portion of fixed and capital costs). Nova argued the full cost approach was a proxy or “rough substitute” for its opportunity costs associated with Commodity Pail and Crate (including the use of ethylene therein).¹⁵ Having thus benefitted from the hundreds of millions of dollars of extra deductions that flowed from the award of full cost accounting, Nova should not be permitted to deduct the same opportunity costs again, even if the law allowed such a deduction (which it does not).

14. The trial judge’s selection of the appropriate method of accounting for ethylene costs, including permitting Nova to apply a full cost approach but rejecting Nova’s “market price” for ethylene, was a factually suffused exercise of discretion, reviewable only for palpable and overriding error. Nova has established no such error. As Nova argued before the FCA on this issue, “[a] judge who carefully canvasses the available valuation methodologies, carefully considers the prior decisions dealing with them, and selects one that he finds to be appropriate in the circumstances should not readily be second-guessed. A trial judge’s decision to choose one method of evaluating infringing profits over another is not a question of law — it is a matter of discretion.”¹⁶

15. The FCA majority was correct to uphold the trial judge’s findings on the appropriate ethylene deduction, including in deferring to the trial judge on factual and discretionary matters.

(ii) Springboard profits

16. Nova’s appeal also seeks to reverse the disgorgement of substantial “springboard” profits, meaning profits Nova earned after Dow’s patent expired but found as a fact by the trial judge to be based on its pre-expiry infringement.

¹⁴ Extract from Reference Trial Transcript, Jan 13, 2017 (Nova closing) [CONF] at 2885:14-25, RR, Tab 7.

¹⁵ Extract from Nova’s Reply Closing Submissions dated Jan 12, 2017 (File No. T 2051-10) [CONF] at para 23, RR, Tab 16 [Nova Reply Closing]; Extract from Reference Trial Transcript, Jan 13, 2017 (Nova closing) [CONF] at 2885-2889, RR, Tab 7; *Dart Industries Inc v Decor Corporation Pty Ltd*, [1993] HCA 54 at paras 14-15 (Aust HC) [*Dart*].

¹⁶ Nova’s Responding Factum on Cross-Appeal at para 25, RR, Tab 17.

17. The trial judge’s conclusions on springboard profits were based on his findings of facts on causation. In particular, he concluded that by building up its market share for SURPASS during the term of Dow’s patent, Nova earned far greater post-expiry profits than it would have by waiting until the patent expired to enter the market.¹⁷ In other words, the SURPASS market share Nova built up pre-expiry by infringing Dow’s patent served as a “springboard” for increased post-expiry SURPASS sales and profits. Nova did not dispute that it earned springboard profits – indeed Nova acknowledged this fact at trial.¹⁸ Disgorgement of these profits ensures that “*all* the profits, direct and indirect, derived by the infringer from his wrongful infringement” are accounted for.¹⁹

18. Indeed, the jurisprudence has widely recognized the “springboard” effect that can result from an infringer building market share through pre-expiry interference with a patentee’s exclusive right.²⁰ There is no reason why the fruits of that interference should fall outside the purview of the accounting remedy, which is meant to protect that exclusive right.

19. The FCA and the FC were unanimous that springboard profits should be available as a matter of law, and that on the facts of this case, disgorgement of Nova’s springboard profits was warranted.²¹ There has been no error of law or palpable and overriding error of fact in the award of springboard profits or in how they were calculated, and it is respectfully submitted that there is no basis for interfering with the unanimous findings of both courts below.

B. Background

20. This appeal relates to an accounting of Nova’s profits for sales of SURPASS polyethylene products that were found to infringe Dow’s Canadian Patent No. 2,160,705 (“the 705 Patent”).

(i) Parties

21. Dow and Nova are competitors in the petrochemicals business. Nova is a private company

¹⁷ *FC Reasons* at paras 112, 130, AR, Vol. I, Tab 1, pp. 45, 51-52.

¹⁸ Extract from Nova’s Closing Submissions dated Jan 9, 2017 (File No. T-2051-10) [CONF] at paras 280-282, RR, Tab 15 [Nova Closing].

¹⁹ *Beloit Canada Ltée/Ltd v Valmet Oy* (1992), 45 CPR (3d) 116 at 119 (FCA), Respondents’ Book of Authorities (“RBOA”), Tab 2.

²⁰ *AstraZeneca Canada Inc v Apotex Inc*, 2015 FC 671 at para 7, varied on other grounds 2017 FCA 7, leave to appeal to SCC refused, 37478 (1 June 2017).

²¹ *FC Reasons* at paras 124, 130, AR, Vol. I, Tab 1, pp. 49, 51-52; *FCA Reasons* at paras 125-128, 142, AR, Vol. I, Tab 5, pp. 226-228, 232.

owned by an investment company controlled by the government of Abu Dhabi.²² It has no special status or public purpose. Nova references its “roots” as an Alberta Crown Corporation,²³ however this was not the case at any time relevant to these proceedings.

(ii) The Invention of the 705 Patent

22. As found by the trial judge in the liability phase, Dow’s 705 Patent resulted from extensive research by Dow’s scientists to investigate polymers at the molecular level to obtain an improved balance of strength properties and to address certain industry recognized trade-offs, e.g., improving one property (e.g., impact strength) only at the cost of another (e.g., tear strength).²⁴ The invention of Dow’s 705 Patent solved this problem. Even Nova’s own polymer scientist Dr. Brown, whom Nova called as a witness at trial, admitted that Dow’s 705 Patent solved the recognized trade-off problem.²⁵ In addition, the polymer blends of the 705 Patent also overcame a further previous trade-off between strength properties and processability.²⁶

23. Nova’s SURPASS infringes **product** claims of the 705 Patent, not claims to a process or a step in a process (a significant point that was misunderstood by the dissenting judge in the FCA).²⁷ That is to say, SURPASS as sold **is** the novel, patented product itself.

(iii) Market for the patented products

24. Launched in 1997, Dow’s ELITE is a commercial embodiment of the 705 Patent.²⁸ ELITE enjoyed significant commercial success with customers who desired the unique and superior combination of good strength properties and good processability enabled by the invention of the 705 Patent. The patented products are typically sold as pellets to businesses called “converters” that convert the pellets into plastic products such as food packaging, heavy duty bags for packaging

²² Nova US SEC Form 20-F (Trial Exhibit PR22) at 21, AR, Vol. III, Tab 20, p. 24.

²³ Factum of the Appellant at para 11.

²⁴ *Dow Chemical Co v Nova Chemicals Corp*, 2014 FC 844 at para 248, 261-262, aff’d *Nova Chemicals Corp v Dow Chemical Co*, 2016 FCA 216 at paras 6-8, leave to appeal to SCC refused, 37274 (20 April 2017); Dow’s Book of Read-ins, Examination of Dr. Lai dated Sep 16, 2016 (Trial Exhibit PR220, Tab 2B) [CONF] at 882:25-884:15, RR, Tab 10.

²⁵ *Nova Chemicals Corp v Dow Chemical Co*, 2016 FCA 216 at para 40; Extract from Liability Trial Transcript, Sep 26, 2013 (Brown cross) at 2164:23-2165:1, RR, Tab 1.

²⁶ “Processability” refers to how well a polyethylene resin can be processed to make the products of interest. See *FC Reasons* at paras 15, 70-72, AR, Vol. I, Tab 1, pp. 6, 32.

²⁷ *FCA Reasons* at paras 119, 191 AR, Vol. I, Tab 5, pp. 225, 245.

²⁸ *FC Reasons* at paras 17, 80, AR, Vol. I, Tab 1, pp. 6-7, 35.

bulk products, stretch wrap, and trash bags.²⁹ The converter then sells such packaging products to downstream users such as food manufacturers.

25. In 2002, Nova launched SURPASS as a direct competitor to ELITE. The evidence shows that Nova identified ELITE as the premier product, or “Cadillac,”³⁰ in the specific and important mLLDPE³¹ marketplace of interest. O’Keefe J. found at the trial on the liability phase that Nova targeted Dow’s ELITE product and designed its SURPASS products as “drop-ins” for ELITE (i.e., designed to be sold to converters to use in place of Dow’s ELITE products).³² The reference trial judge found that “ELITE and SURPASS are the closest substitutes for each other, and many customers who purchase SURPASS would consider replacing it only with ELITE.”³³ Nova’s strategy ultimately paid off handsomely: Nova sold SURPASS for nearly a decade while Dow’s patent was in force, reaping well over \$1 billion in infringing revenue.³⁴

(iv) Liability judgment

26. In his 2014 decision, O’Keefe J. found that Nova’s SURPASS infringed Dow’s 705 Patent. O’Keefe J. granted Dow, *inter alia*, the right to elect an accounting of Nova’s profits resulting from the infringement.³⁵ His judgment was upheld on appeal by the FCA.³⁶ Nova sought leave to appeal to this Court, which was denied.³⁷

(v) U.S. proceedings

27. Nova was also found to infringe the U.S. patent corresponding to the 705 Patent. As referenced by Nova, on appeal of the Supplementary Damages phase in the U.S. proceedings, the

²⁹ Extract from Reference Trial Transcript, Dec 5, 2016 (Thomson chief) at 116:1-116:17, 128:14-128:27, 133:5-134:27, RR, Tab 3.

³⁰ Nova Document: Surpass FPs117 and HPS900 (Trial Exhibit PR16) [CONF] at 7, RR, Tab 8; *FC Reasons* at paras 70-71, AR, Vol. I, Tab 1, p. 32.

³¹ Metallocene linear low-density polyethylene.

³² *FC Reasons* at paras 70-71, AR, Vol. I, Tab 1, p. 32; *Dow Chemical Co v Nova Chemicals Corp*, 2014 FC 844 at para 252.

³³ *FC Reasons* at para 76, AR, Vol. I, Tab 1, pp. 33-34

³⁴ Statement of Ross Hamilton dated Jul 15, 2016 (Trial Exhibit PR100-A) [CONF] at p. 4, RR, Tab 9.

³⁵ *Dow Chemical Co v Nova Chemicals Corp*, 2014 FC 844 at para 283.

³⁶ *Nova Chemicals Corp v Dow Chemical Co*, 2016 FCA 216 at para 93.

³⁷ SCC Case No. 37274 (20 April 2017).

U.S. Patent was held invalid due to an intervening change in U.S. law.³⁸ However, this finding had no impact on the infringement and validity findings in Canada based on Canadian law and this was acknowledged by Nova’s own counsel in a letter to the FCA prior to the appeal from the Liability Judgment.³⁹

C. The Reference Trial and Judgment

28. Nova’s infringing profits were assessed at a 17-day reference trial in December 2016 and January 2017. The trial judge, Fothergill J., rendered his confidential judgment and reasons for judgment on April 7, 2017, followed by a public version.⁴⁰ Following supplemental submissions, the trial judge issued a supplemental judgment on June 29, 2017, which fixed the final amount payable by Nova to Dow at \$644,623,550 CAD.⁴¹

(i) Nova conceded that it had no non-infringing alternatives and could not seek differential profits as per *Schmeiser*

29. In the reference, Nova initially asserted that it could have sold certain non-infringing premium products as substitutes for SURPASS – but only for three SURPASS customers that represented a small percentage of overall SURPASS sales.⁴² Nova sought to use the *Schmeiser* “differential profits” approach for SURPASS sales to these customers.⁴³

30. However, in Nova’s opening statement, it abandoned this allegation and dropped its “differential profits” claim **in its entirety**,⁴⁴ the trial judge noting: “...Nova concedes that there were no ‘direct non-infringing alternatives’ available for the purpose of applying the ‘differential profits’ approach.”⁴⁵

31. Nova repeated this concession in its submissions before the FCA, noting: “[a]ll parties

³⁸ *FC Reasons* at paras 18-20, AR, Vol. I, Tab 1, pp. 7-8.

³⁹ Letter filed by Counsel for Nova dated October 27, 2015, without enclosure (File No. A-379-14 (T-2051-10)), RR, Tab 14.

⁴⁰ See: *FC Reasons*, AR, Vol. I, Tab 1.

⁴¹ Supplementary Reasons of the Federal Court, [2017 FC 637](#), AR, Vol. I, Tab 2, p. 169. Neither party appealed the three specific issues addressed in these supplemental reasons.

⁴² Nova Closing at paras 209-221, RR, Tab 15.

⁴³ Soriano Report at paras 65(d), 153-156, RR, Tab 11.

⁴⁴ Extract from Reference Trial Transcript, Dec 5, 2016 (Nova’s opening statement) [CONF] at 69:27-70:6, RR, Tab 2.

⁴⁵ *FC Reasons* at para 146, AR, Vol. I, Tab 1, p. 56.

agreed that the differential profits method [as referenced in *Schmeiser*] was not the appropriate method in this case.”⁴⁶

(ii) Nova’s claimed “market price” deduction for ethylene and its alternative request for full cost accounting for its ethylene production costs

32. During the reference, Nova sought to avoid disgorging its full infringing SURPASS profits by attempting to deduct a hypothetical “market price” as a cost for the ethylene used to make SURPASS, rather than the actual cost it incurred manufacturing the ethylene.⁴⁷

33. The trial judge rejected Nova’s “market price” deduction argument. He held that “[a]n accounting of profits should be based on actual revenues and costs,” and found that Nova’s claimed “market price” was “a theoretical cost [Nova] did not incur.”⁴⁸

34. As an alternative to its “market price” deduction position for ethylene costs, Nova sought at trial to use “full cost” or “absorption” accounting for its production of ethylene (this was in addition to seeking a full cost approach to its overall production of infringing SURPASS, discussed below).⁴⁹ Under this approach, instead of only deducting its incremental costs for producing the ethylene used in SURPASS, Nova also sought to deduct an allocation of non-incremental fixed costs (e.g., depreciation, overhead, etc.) associated with its ethylene production plants.⁵⁰ The trial judge found in favour of Nova on this alternative position.⁵¹

(iii) The trial judge accounted for Nova’s hypothetical sales of Commodity Pail and Crate by awarding full cost accounting on SURPASS production

35. Nova asserted at trial that if it had not made and sold the infringing SURPASS, it would have filled out the capacity of the facility used to make SURPASS with different non-infringing products, such as Commodity Pail and Crate.⁵² Nova admitted these products were **not substitutes for SURPASS**, which is a premium “linear” low-density product used in entirely different

⁴⁶ Nova’s Responding Factum on Cross-Appeal at paras 29, 36-37, RR, Tab 17.

⁴⁷ *FC Reasons* at para 134, AR, Vol. I, Tab 1, p. 53.

⁴⁸ *FC Reasons* at para 139, AR, Vol. I, Tab 1, pp. 54-55.

⁴⁹ *FC Reasons* at para 134, AR, Vol. I, Tab 1, p. 53; Nova Closing at para 129, RR, Tab 15.

⁵⁰ *FC Reasons* at para 149, AR, Vol. I, Tab 1, p. 57.

⁵¹ *FC Reasons* at paras 140, 165, AR, Vol. I, Tab 1, p. 55.

⁵² Nova Closing at paras 182-183, RR, Tab 15; Soriano Report at para 110(b) RR, Tab 11. High-density polyethylene used for low-end rigid items such as pails and crates.

customer applications.⁵³

36. As noted above, Nova relied on its alleged ability to make and sell Commodity Pail and Crate to argue for the use of “full cost accounting” in the manufacture of its infringing SURPASS. In seeking this relief, Nova admitted that **any profits** it may hypothetically have realized on Commodity Pail and Crate are **not** deductible as a matter of law.⁵⁴

37. Accordingly, Nova stated at trial: “NOVA is not claiming an offset for the profit that it would have realized from the sale of [Commodity Pail and Crate].”⁵⁵

38. In arguing for full cost accounting, Nova directed the trial judge to the 1993 Australian High Court decision *Dart*,⁵⁶ a patent infringement case, which is considered to be a leading authority on the general principles applicable to the accounting of profits remedy.⁵⁷ In *Dart*, the court held that full cost accounting is appropriate where the defendant was operating its plant at full capacity, and would still have been able to operate the plant at full capacity with non-infringing products absent the infringement. However, in the very quote from *Dart* that Nova presented to the trial judge, the court was clear that the hypothetical profits from a forgone opportunity to make and sell such non-infringing products (i.e., opportunity costs) are not deductible:

In calculating an account of profits, **the defendant may not deduct the opportunity cost, that is, the profit forgone on the alternative products.**⁵⁸

39. Importantly, Nova argued before the trial judge that full cost accounting would be a “rough substitute” to account for lost opportunity costs on Commodity Pail and Crate where a differential profits deduction was not available:

In other words, while the lost opportunity costs, i.e., profits on the next best NIA⁵⁹[,]

⁵³ Nova Closing at para 191(a), RR, Tab 15; Factum of the Appellant at para 26.

⁵⁴ Soriano Report at para 127, RR, Tab 11.

⁵⁵ Soriano Report at para 77(d), RR, Tab 11.

⁵⁶ *Dart Industries Inc v Decor Corporation Pty Ltd*, [1993] HCA 54 (Aust HC).

⁵⁷ See for example: *Lubrizol Corp v Imperial Oil Ltd.*, [1997] 2 FC 3 (FCA) (WL) at para 8, Appellant’s Book of Authorities, (“ABOA”), Tab 6; Christopher B Seaman *et al.*, “Lost Profits and Disgorgement” in C Bradford Biddle *et al.*, eds, *Patent Remedies and Complex Products: Toward a Global Consensus* (Cambridge: Cambridge University Press, 2019), pp. 79-80.

⁵⁸ *Dart Industries Inc v Decor Corporation Pty Ltd*, [1993] HCA 54 at paras 14-15 (Aust HC); Nova Closing at para 167, RR, Tab 15.

⁵⁹ “NIA” stands for non-infringing alternative.

would be the preferred approach, it is often too complicated to employ (except with relatively simple facts like *Schmeiser*). The **deduction of a portion of fixed costs is a rough substitute** and the principles of absorption cost accounting are well established to enable this to be done.⁶⁰

40. The trial judge accepted Nova's full cost accounting argument, thus allowing Nova to deduct hundreds of millions of dollars of additional "fixed costs" from its infringing SURPASS profits.⁶¹ Nevertheless, Nova now relies on the very same hypothetical foregone Commodity Pail and Crate sales that it used to support its request for full cost accounting to seek a further differential profits offset for hypothetical "ethylene profits," purportedly based on *Schmeiser*, **in addition to** the "rough substitute" of full cost accounting that was already granted.⁶² *Dart* stands unequivocally against this result, which is unsupported by any authority.

41. Contrary to Nova's current submissions, in ordering full cost accounting, the trial judge did not make any findings as to the revenues or profits that Nova allegedly could have made from hypothetical sales of Commodity Pail and Crate (beyond simply covering the deducted fixed costs), including whether any such profits would also have covered the alleged "ethylene profits." To the contrary, the trial judge noted that the Commodity Pail and Crate market "is characterized by ... low profit margin," "is complex and not always profitable," sometimes there is "not enough demand" in North America, and selling such products to Asia is a "last resort."⁶³

42. The trial judge also did not find that there was any market demand for the ethylene used in SURPASS (and as noted by the FCA, there was evidence to the contrary), nor did he find that there was any legitimate "market price" for that ethylene.⁶⁴

(iv) **Springboard**

43. At trial, Dow alleged that the market share Nova built up by infringing pre-patent expiry served as a "springboard" for increased post-expiry sales, from which Nova profited ("springboard

⁶⁰ Nova Reply Closing at para 23, RR, Tab 16.

⁶¹ These deductions were over and above Nova's "incremental cost" deductions, which have traditionally been the only allowable deductions in the accounting of profits jurisprudence.

⁶² Factum of the Appellant at paras 111-113.

⁶³ *FC Reasons* at paras 12, 151, AR, Vol. I, Tab 1, pp. 5, 58.

⁶⁴ *FC Reasons* at paras 139-140, AR, Vol. I, Tab 1, pp. 54-55; *FCA Reasons* at paras 92-93, AR, Vol. I, Tab 5, pp. 216-217

profits”).⁶⁵ Nova in fact conceded that it earned such springboard profits,⁶⁶ but disputed that such profits could be awarded at law and, in the alternative, disputed the amount (and manner of calculation) of post-expiry sales attributable to its springboard advantage.⁶⁷

44. The trial judge rejected Nova’s argument that springboard profits are not awardable at law, and preferred Dow’s evidence on the amount of post-expiry sales that should be part of the springboard award (which Nova does not dispute).

45. The trial judge held that springboard profits come down to a factual question of causation: “a type of [profit] to be proven with evidence,”⁶⁸ and found as a fact that certain post-expiry sales were based on Nova’s pre-expiry infringing conduct. This finding too has not been challenged.

D. FCA Judgment

46. The majority of the FCA upheld the trial judge’s findings on all issues, including ethylene costs, springboard profits, and full cost accounting, with the dissenting opinion only differing on the ethylene costs issue.

(i) Overarching principles of the accounting of profits remedy

47. The majority decision of the FCA sets out the recognized underlying principles of an accounting of profits, which are well-accepted including by the dissenting judge.⁶⁹ The FCA notes that an accounting of profits is focussed on vindicating, but not expanding, the patent monopoly.⁷⁰ This is accomplished by two basic rules: (1) only actual profits (revenues minus actual costs) are disgorged; and (2) only profits that have resulted from the patent infringement are disgorged (i.e., there is a requirement for a causal connection).⁷¹

48. The FCA also explicitly notes that an accounting of profits is **not** punitive, though it is deterrent in the sense that it removes any incentive to infringe by ordering disgorgement of all

⁶⁵ *FC Reasons* at para 112, AR, Vol. I, Tab 1, p. 45.

⁶⁶ Nova Closing at para 263, RR, Tab 15.

⁶⁷ *FC Reasons* at para 115, AR, Vol. I, Tab 1, p. 46; Nova Closing at paras 262-283, RR, Tab 15.

⁶⁸ *FC Reasons* at paras 120, 124, AR, Vol. I, Tab 1, pp. 48, 49.

⁶⁹ *FCA Reasons* at para 185, AR, Vol. I, Tab 5, p. 244.

⁷⁰ *FCA Reasons* at paras 19, 23, 35, AR, Vol. I, Tab 5, pp. 191, 193, 197.

⁷¹ *FCA Reasons* at para 36, AR, Vol. I, Tab 5, pp. 197-198.

profits causally connected to the infringement.⁷²

49. The FCA's first rule (that only actual profits are disgorged) aligns with the well-accepted method of conducting an accounting of profits, whereby the first step is to calculate the infringer's profits based on actual revenues and actual costs. It is only after the defendant's actual profits from the infringing sales are calculated that a court considers whether "differential profits" or "value-based apportionment" would be appropriate if, for example, there was a non-infringing alternative that could have been substituted for the invention.

50. The FCA explains that in determining the infringer's actual profits, courts should not resort to hypotheticals or "but for" analysis. For example, infringers cannot claim deductions for costs that are purely based on hypotheticals, such as "opportunity costs."⁷³

51. The FCA illustrates why allowing deduction of opportunity costs would undermine deterrence using an analogy of bank robbers refusing to return stolen money because they "would have earned [some of it] in the workplace had they never robbed the bank."⁷⁴ This analogy simply illustrates the point about opportunity costs, namely that deduction of hypothetical revenues or costs would result in infringement having "only upside, no downside" which "chips away at the patent monopoly" and "undercuts the patent bargain."⁷⁵ The FCA majority did not morally or legally equate patent infringement to bank robbery as Nova suggests.

52. The FCA's second rule, consistent with *Schmeiser*, is that once the actual infringing profits are calculated the courts must consider appropriate non-infringing alternatives (or "value-based apportionment"), where available, to ensure that only profits resulting from the patent infringement are disgorged.⁷⁶ The FCA relies on *Schmeiser* and prior decisions of the FCA in noting that a non-infringing alternative ("NIA") is not simply anything a defendant might have done had it not infringed; rather, it refers to the next best non-infringing "course of action that can isolate the value of the patent."⁷⁷ If such a substitute exists, then the court should compare the "non-infringing

⁷² *FCA Reasons* at paras 29, 32, 34, AR, Vol. I, Tab 5, pp. 195-197.

⁷³ *FCA Reasons* at para 41, AR, Vol. I, Tab 5, p. 199.

⁷⁴ *FCA Reasons* at para 42, AR, Vol. I, Tab 5, p. 199.

⁷⁵ *FCA Reasons* at paras 39, 41, 42, AR, Vol. I, Tab 5, pp. 198-199.

⁷⁶ *FCA Reasons* at paras 56-57, 61, AR, Vol. I, Tab 5, pp. 205-207.

⁷⁷ *FCA Reasons* at paras 57-61, 73-79, AR, Vol. I, Tab 5, pp. 206-207, 210-213.

baseline” (profits associated with the non-infringing option) to the profits made from the infringing product.⁷⁸

53. Nova criticizes the FCA’s use of the term “non-infringing baseline.” In adopting this term, however, the FCA did not change what qualifies as a non-infringing alternative – it is simply a case of preferred terminology on the part of the FCA.⁷⁹ Both the FCA decision and earlier case law are unanimous that an NIA must be a “true substitute for” or “non-infringing version of” the invention.⁸⁰ Additionally, the term “non-infringing baseline” was used earlier in the same context in *Rivett*, a 2009 decision of the Federal Court that was affirmed on appeal.⁸¹

(ii) The FCA majority decision is not a novel approach

54. Nova accuses the FCA majority of “abandoning but for causation in favour of a novel approach,” but this is incorrect. As noted above, while the majority may have preferred different terminology than what was used in some prior decisions, their approach is nevertheless the same one that has always been applied since *Schmeiser*.⁸² As noted by the FCA, a damages remedy is based on reconstructing a “but for” hypothetical world to determine what sales (and profits) the plaintiff would have made had the defendant not infringed the patent. However, the accounting of profits remedy, as correctly observed by the majority, is not based on a “but for” hypothetical world reconstruction. Instead, the accounting of profits remedy is based on determining the **actual** revenue from **actual** sales that the defendant made and, after subtracting its **actual** costs, determining the **actual** profits the defendant obtained from infringement. Even Nova agrees that this is the first step.⁸³

55. The question then becomes whether all of the infringer’s actual profits are attributable to

⁷⁸ *FCA Reasons* at paras 71-79, pp. 210-213.

⁷⁹ Factum of the Appellant at paras 52, 62-70.

⁸⁰ *FCA Reasons* at paras 53-58, AR, Vol. I, Tab 5, pp. 203-206.

⁸¹ *Monsanto Canada Inc v Rivett*, [2009 FC 317](#) at para 56 [*Rivett*], aff’d [2010 FCA 207](#).

⁸² In Canada and other jurisdictions, various terms have been used for the identical concept of the next best substitute for the invention, including “non-infringing option” (e.g., *Varco Canada Limited v Pason Systems Corp*, [2013 FC 750](#) at para 416), “non-infringing alternative” (e.g., *Apotex Inc v ADIR*, [2020 FCA 60](#) at para 42), “non-infringing baseline” (e.g., *Monsanto Canada Inc v Rivett*, [2009 FC 317](#) at para 56), and “standard of comparison” (used in the U.S, e.g., *Cambria Iron Co v Carnegie Steel Co*, 224 F 947 (3d Cir 1915) (WL), RBOA, Tab 6).

⁸³ Factum of the Appellant at para 101.

the infringement. This inquiry, as noted by the FCA, is also not based on any “but for” world an infringer can hypothesize, but is rather grounded in a specific and targeted comparison that isolates the value of the invention (i.e., what profits would the infringer have made using the “next best non-infringing option” to the invention, if one was available).⁸⁴ The FCA decision affirms the *Schmeiser* approach of isolating the value of the invention; it does not “depart” from *Schmeiser* as Nova asserts.

(iii) Nova’s claimed “market price” deduction for ethylene

56. The FCA rejected Nova’s attempt to deduct a hypothetical elevated “market price” for ethylene, upholding the FC’s finding that Nova could only deduct the costs it actually incurred.⁸⁵

57. The FCA held that Nova’s claimed deduction failed both factually and legally. Factually, Nova did not prove that it could have sold the ethylene to third parties at the claimed “market price” if it had not used the ethylene to make infringing SURPASS.⁸⁶ The FCA observed that there was confidential evidence that it could not have sold additional ethylene.⁸⁷

58. Further, the majority found that NOVA’s alleged “ethylene profits” were purely hypothetical, and thus legally irrelevant.⁸⁸ Ethylene was not a non-infringing alternative for SURPASS, and Nova conceded that it had no non-infringing alternative.⁸⁹ The FCA also notes that because ethylene is not a driver of market demand for Nova’s SURPASS, there is no basis for apportionment.⁹⁰ Market demand arose because of the patented invention used by Nova in SURPASS.⁹¹ In particular, market demand for SURPASS was found, as a fact, to be driven by the improved strength characteristics and good processability that the invention specifically provided.⁹²

⁸⁴ *FCA Reasons* at paras 77-79, AR, Vol. I, Tab 5, pp. 212-213.

⁸⁵ *FC Reasons* at paras 108, 111, 130, 140, 165, AR, Vol. I, Tab 1, pp. 43-44, 51, 55, 63-64; *FCA Reasons* at paras 90-106, AR, Vol. I, Tab 5, pp. 216-221.

⁸⁶ *FCA Reasons* at para 92, AR, Vol. I, Tab 5, pp. 216-217.

⁸⁷ *FCA Reasons* at paras 92-93, AR, Vol. I, Tab 5, pp. 216-217; Extract from Reference Trial Transcript, Dec 15, 2016 (Vermani cross) [CONF] at 1526:11-14, RR, Tab 4; Trial Exhibit PR253, Tab 1 [CONF], RR, Tab 12.

⁸⁸ *FCA Reasons* at para 94, AR, Vol. I, Tab 5, p. 217.

⁸⁹ *FCA Reasons* at para 97, AR, Vol. I, Tab 5, p. 218.

⁹⁰ *FCA Reasons* at para 92, AR, Vol. I, Tab 5, pp. 216-217.

⁹¹ *FCA Reasons* at para 105, AR, Vol. I, Tab 5, p. 220.

⁹² *FC Reasons* at paras 70-76, AR, Vol. I, Tab 1, pp. 30-34; *FCA Reasons* at para 104-106, AR, Vol. I, Tab 5, p. 220.

59. Woods J., in dissenting on this issue, suggested that the trial judge failed to consider the issue of apportionment. However, as held by the majority, apportionment simply doesn't apply on these facts.⁹³ The majority also noted that Woods J. ignored numerous portions of the trial judge's decision showing that he did direct his mind to the relevant issues of causation and apportionment.⁹⁴

60. The majority also noted that Woods J.'s views on apportionment were based on a misunderstanding that the patent claims cover a process; in fact, they cover the final, novel polymer products sold by Nova.⁹⁵

(iv) Springboard

61. The FCA unanimously upheld the FC's award of springboard profits.⁹⁶ The FCA found that there is no reason why springboard profits should be legally barred in light of the principle that all profits causally attributable to the infringement should be disgorged, and that Nova's post-expiry springboard profits were found as a fact to represent profits causally linked to its infringing activity while the patent was in force.⁹⁷ As noted by the FCA, allowing an infringer to retain any profits (including post-expiry profits) caused by the infringement within the patent term would incentivize infringement.⁹⁸

II – ISSUES

62. Nova raises two issues on this appeal:

- (1) Did the Federal Court of Appeal err in law by failing to apportion Nova's ethylene profits from the award to Dow?

Dow's position: No. Apportionment does not apply here nor does a *Schmeiser* differential profits approach. Nova is only allowed to deduct its actual costs of producing the ethylene used to make SURPASS, and not higher hypothetical "ethylene profits" that Nova did not actually incur or prove.

⁹³ *FCA Reasons* at paras 104-106, 113-120, AR, Vol. I, Tab 5, pp. 220-226.

⁹⁴ *FCA Reasons* at paras 113-119, 205 AR, Vol. I, Tab 5, pp. 233-225, 249-250.

⁹⁵ *FCA Reasons* at para 119, AR, Vol. I, Tab 5, p. 225.

⁹⁶ *FCA Reasons* at paras 182, 208, AR, Vol. I, Tab 5, pp. 242, 251.

⁹⁷ *FCA Reasons* at paras 126, 130-131, AR, Vol. I, Tab 5, pp. 227-229.

⁹⁸ *FCA Reasons* at para 128, AR, Vol. I, Tab 5, p. 228.

- (2) Did the Federal Court of Appeal err in law in upholding the award to Dow of “springboard profits” earned on products made and sold after the patent expired?

Dow’s position: No. Nova is required to disgorge all profits attributable to its infringing activity while the patent was extant, including the post-expiry springboard profits that were found, and admitted, to be causally attributable to its pre-expiry infringement.

III – ARGUMENT

A. Standard of Review

63. Both issues subject to this appeal are factually suffused and ought to be reviewed on the deferential standard of palpable and overriding error.

64. While the correct interpretation of the “differential profits” approach in *Schmeiser* is a matter of law, the ultimate question of the correct cost to deduct for Nova’s ethylene is a question of mixed fact and law because it concerns application of the principles of an accounting of profits to the facts – Nova’s production and use of a raw material, ethylene, for SURPASS.⁹⁹

65. Though Woods J. dissented, her disagreement with the trial judge and the majority was not on matters of basic legal principle. Rather, she misapprehended the proper legal test for apportionment and differed from the trial judge and majority on the questions of causation and the appropriate deduction for ethylene based on the facts.

66. The majority correctly identified the factually suffused nature of the issue and applied the appropriate standard of review of palpable and overriding error:

[116] Ultimately causation depends on the facts. In this case, for very good reasons, the Federal Court found that all of the gain earned by NOVA as a result of its more efficient manner of manufacturing ethylene was gain made as a result of the infringement. It made this finding mindful and having considered all of the evidence and arguments before it: *Housen* at para. 46. This finding was a factually suffused one on a question of mixed fact and law that attracts the very high standard of palpable and overriding error [...]¹⁰⁰

⁹⁹ See *Rivett v Monsanto Canada Inc*, [2010 FCA 207](#) at para 69 where this court applied a palpable and overriding error standard of review to a similar issue.

¹⁰⁰ *FCA Reasons* at para 116, AR, Vol. I, Tab 5, p. 224.

67. The same standard should apply to the present appeal.

68. Given that there is no legal bar to an award of springboard profits (and Nova does not point to one), their award in this case again comes down to a factual question of causation, on which the trial judge’s findings should not be disturbed absent a palpable and overriding error.¹⁰¹ The FCA was unanimous in finding no such error, and none has been shown.¹⁰²

B. Law

(i) Purposes of the *Patent Act* and the accounting of profits remedy

69. Patents are intended to encourage research and development and to coax inventions into the public domain.¹⁰³

70. The primary mechanism to accomplish these aims is the granting to the patentee of a time-limited **exclusive right** to make, construct, use or sell the invention.¹⁰⁴ The exclusive right as the basis of patent law has been enshrined in the *Patent Act* since Confederation and before, as noted by Binnie J. in *Free World Trust*:

[13] Patent protection rests on the concept of a bargain between the inventor and the public. In return for disclosure of the invention to the public, the inventor acquires for a limited time the **exclusive right to exploit it**. It was ever thus.¹⁰⁵

71. An accounting of profits is one of the “arsenal of remedies” provided in the *Patent Act* to protect the patentee’s exclusive right.¹⁰⁶ The accounting remedy has two recognized rationales that serve to vindicate and protect the patentee’s exclusive right: to restore to the patentee profits rightfully belonging to it but wrongly appropriated by the infringer, and to ensure that the violator of the patentee’s exclusive right does not retain any profits from that activity thus deterring people

¹⁰¹ *FCA Reasons* at paras 123-124, AR, Vol. I, Tab 5, p. 226.

¹⁰² *FCA Reasons* at para 142, AR, Vol. I, Tab 5, p. 232.

¹⁰³ *Apotex Inc v Wellcome Foundation Ltd*, [2002 SCC 77](#) at para 37; *Free World Trust c Électro Santé Inc*, [2002 SCC 66](#) at para 42 [*Free World Trust*]; *AstraZeneca Canada Inc v Apotex Inc*, [2017 SCC 36](#) at para 39.

¹⁰⁴ *Pfizer Canada Inc v Novapharm Ltd*, [2012 SCC 60](#) at para 32; *Free World Trust c Électro Santé Inc*, [2002 SCC 66](#) at para 13; *AstraZeneca Canada Inc v Apotex Inc*, [2017 SCC 36](#) at para 51.

¹⁰⁵ *Free World Trust c Électro Santé Inc*, [2002 SCC 66](#) at para 13 [emphasis added].

¹⁰⁶ *Apotex Inc v Wellcome Foundation Ltd*, [2002 SCC 77](#) at para 45.

from infringing others' patents.¹⁰⁷ Nova's proposed new approach fails to meet either objective.

(ii) Nova's proposed new approach to accountings of profits

72. Nova's proposed new approach to the accounting of profits remedy would allow infringers to deduct hypothetical profits from foregone product sales having nothing to do with the patent. This approach fails to meet the restorative objective of the remedy because it is disconnected from the profits that are intended to be restored – the profits resulting from the infringer's interference with the patentee's monopoly. To accomplish this objective, the law, as it stands, requires taking into account profits that the infringer could have earned **by competing with the patentee using a non-infringing substitute** for the patented product, as permitted by *Schmeiser*. This approach is focused on the invention and properly limits profits awards to the value of the competitive edge provided by the patent. As held by the FCA in *ADIR #2*, such a non-infringing alternative must be taken into account because **“a patent does not confer a complete monopoly if a defendant could make or sell a non-infringing version of the patented invention.”**¹⁰⁸

73. However, the same reasoning does not apply if the infringer would have been unable to compete with the invention without infringing. In such a case, all profits resulting from the infringement are “wrongly appropriated,¹⁰⁹ and there is no logical or legal basis to limit disgorgement of such **actual** unlawful profits because the infringer might, in a but-for world, have hypothetically sold completely different products, in a completely different market, to completely different customers. This is Nova's argument, but it would be a radical and unsupported extension of *Schmeiser*, which directs that an apples-to-apples comparison be made to isolate the value of the invention. Nova proposes an apples-to-anything comparison that, by ignoring the value of the invention, strips the accounting of profits remedy of its ability to effectively protect the patentee's exclusive right.

74. Nova disputes that the goal of deterring infringement should play any role in an accounting of profits for patent infringement. However, the deterrence rationale has been recognized applying

¹⁰⁷ *Strother v 3464920 Canada Inc*, 2007 SCC 24 at paras 75-77.

¹⁰⁸ *Apotex Inc v ADIR*, 2020 FCA 60 at para 40 [emphasis added], leave to appeal to SCC refused, 39172 (24 September 2020).

¹⁰⁹ *Strother v 3464920 Canada Inc*, 2007 SCC 24 at para 76.

to civil remedies in general,¹¹⁰ and patents in particular.¹¹¹ This only makes sense given that the foundation of the *Patent Act* is to provide the patentee the exclusive right to use the invention when it has met all the requirements under the *Act* to permit the granting of the patent.¹¹² The exclusive right conferred by the *Patent Act* has no practical force or effect if the remedies are not intended to, and do not, protect that exclusive right by deterring its violation. The FCA recognized this, noting that “the *Patent Act* gives the patentee a right to exclusivity over the invention or, put negatively, a right not to be forced into a joint venture with anyone concerning its invention.”¹¹³

75. This Court has recognized that enforceability of a patentee’s exclusive right through the statutory remedies of the *Patent Act* is essential to meeting the underlying purposes of the *Act*:

[A]t least one of the policy objectives underlying the statutory remedies available to a patent owner is to make disclosure more attractive, and thus hasten the availability of useful knowledge in the public sphere in the public interest.¹¹⁴

76. Though deterring infringement is one of the aims of the accounting of profits remedy, deterrence does not mean punishment. As held by the FCA, an accounting of profits is not punitive because it requires the infringer to pay no more than the profits gained from infringement – there is no penalty. Nevertheless, an accounting of profits deters, as it should, both the infringer and others who might be considering infringing by requiring the disgorgement of **all** profits from the infringement.¹¹⁵

77. In depriving the infringer of all benefits of infringement, it is irrelevant whether the infringer could have earned profits in some other market or business (i.e., an opportunity cost). Indeed, such generalized foregone opportunity costs **must** be irrelevant for an accounting of profits to deter infringement. A prospective infringer must realize it will retain no profit from the infringing endeavour, and that it could well be better off pursuing a different, legal line of business from which it can earn and retain profits. As observed by the FCA, if opportunity costs were deductible,

¹¹⁰ *Atlantic Lottery Corp. Inc v Babstock*, 2020 SCC 19 at para 107.

¹¹¹ *Monsanto Canada Inc v Rivett*, 2009 FC 317 at paras 18-26, aff’d 2010 FCA 207.

¹¹² *Patent Act*, RSC 1985, c P-4, s 42.

¹¹³ *FCA Reasons* at paras 109, 185, AR, Vol. I, Tab 5, pp. 222, 244.

¹¹⁴ *Cadbury Schweppes Inc v FBI Foods Ltd.*, [1999] 1 SCR 142 at para 46.

¹¹⁵ *FCA Reasons* at paras 31-33, AR, Vol. I, Tab 5, pp. 196-197.

it would “jeopardize the patent bargain by creating wrong incentives and weakening deterrence.”¹¹⁶

78. Similarly, and contrary to Nova’s submissions, it is also irrelevant whether the infringer would have pursued these other legal business opportunities had it been subject to an injunction. The remedy’s purpose is not to put an infringer in the same position as a competitor who chose to respect the patentee’s exclusive rights, whether by never infringing or obeying an injunction.

79. Nova advocates for an approach to the accounting of profits remedy that is **admittedly** designed to provide **no deterrence**, and thus does not function to serve the goals of the *Patent Act* and protect and vindicate the patentee’s exclusive right.¹¹⁷ An infringer would, at worst, be entirely indifferent to infringement. If not caught, it keeps the full unlawful advantage; if caught, it is no worse off from a profits perspective than if it had pursued only legal activities. Infringement would simply become a game of “catch me if you can” with no material risk to the infringer.

80. Nova asserts that an accounting of profits must leave the infringer no worse off than had it not infringed.¹¹⁸ However, that is not the goal of the accounting of profits remedy. As held by the FCA, an accounting of profits is intended to strip “the benefits obtained by infringers as a result of infringement of the patent.”¹¹⁹ A non-infringing party that decides to pursue legal profits may well end up better off than an infringer who has to disgorge all its gains.

81. In support of its theory, Nova proposes a three-step approach,¹²⁰ the same one proposed by Professor Siebrasse on his blog, that skips over a well-accepted and essential step in the accounting analysis: **determine whether a non-infringing option (or alternative) to the invention exists.**¹²¹

82. This unsupported approach is explicitly premised on Professor Siebrasse’s opinion that “an accounting is not intended to disincentivize infringement.”¹²² This opinion, contrary to Canadian law and jurisprudence, appears to be based on concerns he has about other aspects of patent law, such as speculation that some litigants may unknowingly infringe a patent. However, any concerns

¹¹⁶ *FCA Reasons* at para 108, AR, Vol. I, Tab 5, p. 221.

¹¹⁷ Factum of the Appellant at paras 8, 82.

¹¹⁸ Factum of the Appellant at para 106.

¹¹⁹ *FCA Reasons* at para 33, AR, Vol. I, Tab 5, pp. 196-197.

¹²⁰ Factum of the Appellant at para 101.

¹²¹ *Varco Canada Limited v Pason Systems Corp.*, 2013 FC 750 at para 417.

¹²² Norman Siebrasse, “Nova v Dow: A Radical Departure from Established Law,” (6 October 2020), online (blog), accessible [here](#): *Sufficient Description*.

with the adequacy of the patent public notice system and/or predictability of patent law outcomes should be addressed directly by Parliament, not by inviting courts to render the accounting of profits remedy unable to protect the exclusive rights granted under the *Patent Act*. Moreover, as an equitable remedy, the trial judge always has the discretion not to award an accounting of profits in cases where it would be inequitable to do so.¹²³

(iii) Cost deductions

83. The accounting of profits remedy is, and always has been, focussed on actual revenues and actual costs. As this Court held in *Strother*, only “reasonable and necessary expenses **incurred**” to earn the revenues are deductible.¹²⁴ In other words, profit is determined by “calculating the gross revenues from infringement and deducting the incremental costs of earning that revenue.”¹²⁵

84. Hypotheticals as to how costs might have been higher or lower are not (and should not be) part of the analysis. Whether an infringer’s unlawful activities were highly profitable or barely so, it still must disgorge all profits attributable to the infringement, but no more than it actually made. The issue of inefficient infringement was addressed in the U.S. as far back as 1853 in *Livingston*, in which the U.S. Supreme Court concluded that the defendant should only have to disgorge its actual profits from the infringement, not the higher profits that “with due diligence and prudence might have been, realized.”¹²⁶

85. In Australia, courts have similarly applied the principle of taking the infringer “as it is” both for efficient and inefficient aspects of the infringing endeavour. For example, the Federal Court of Australia in *LED Builders* rejected a claim by the defendant for deduction of overheads that were not in fact incurred, but might reasonably have been incurred.¹²⁷ Conversely, the court also rejected the plaintiff’s argument that the court should decline to deduct rent paid by the defendant to a related entity that exceeded the market price. The market price was not applicable because it was

¹²³ *Seedlings Life Science Ventures, LLC v Pfizer Canada ULC*, 2021 FCA 154 at paras 76-81.

¹²⁴ *Strother v 3464920 Canada Inc*, 2007 SCC 24 at paras 97 [emphasis added].

¹²⁵ *Apotex Inc v H Lundbeck A/S*, 2013 FC 192 at paras 282-283; *Frac Shack Inc v AFD Petroleum Ltd*, 2017 FC 104 at para 292, aff’d 2018 FCA 140 at paras 62-64 [*Frac Shack*]; *Varco Canada Ltd v Pason Systems Corp*, 2013 FC 750 at para 417.

¹²⁶ *Livingston v Woodworth* 56 US 546 (1853) at 559, RBOA, Tab 10.

¹²⁷ *LED Builders Pty Ltd v Eagle Homes Pty Ltd*, [1999] FCA 584 at para 178 (FC Australia) [*LED Builders*].

not the amount actually paid.¹²⁸

86. This same approach “of taking the defendant as you find it” in respect of cost deductions has also been unanimously applied in Canada, including with respect to claims of “efficient” infringement, regardless of whether the claim is framed as one of cost deduction or “apportionment.” Just as the inefficient infringer is not punished for its inefficiency by disgorging more than the profits actually earned, the efficient infringer is not rewarded for having been particularly successful in its infringement. As held in by the Federal Court in *Varco*:

[The defendant’s] approach is tantamount to rewarding the person who unlawfully uses an item for its stellar use – one keeps the bulk of the ill-gotten gains because they did it so well [...]¹²⁹

87. Consistent with the principle that the infringer must be taken as you find him, the defendant in *Monsanto v Janssens* was not allowed any deduction for land costs (e.g., leasing costs as were permitted for two other defendants), since he **owned** the land in which he grew the infringing crop and failed to prove any costs of ownership.¹³⁰ In *Rivett*, the defendant was allowed to deduct rents since he had **leased** the land used to grow the infringing crop, but not hypothetical labour costs that he did not actually pay (because he provided the labour himself at no actual cost).¹³¹

88. Thus, the well-established principle of taking the infringer as you find him results in disgorgement of the actual profits from the infringement after actual expenses are taken into account.

(iv) The “Schmeiser” differential profits approach and NIAs

89. In *Schmeiser*, this Court confirmed that the value-based differential profit approach is the preferred means of calculating an accounting of profits. This approach applies when there is a “non-infringing option” that the defendant could have used instead of infringing:

The preferred means of calculating an accounting of profits is what has been termed the value-based or “differential profit” approach, where profits are allocated according to the value contributed to the defendant’s wares by the patent. [...] A comparison is to be made between the defendant’s profit attributable to the invention and his profit

¹²⁸ *LED Builders Pty Ltd v Eagle Homes Pty Ltd*, [1999] FCA 1141 at para 26 (FC Australia).

¹²⁹ *Varco Canada Ltd v Pason Systems Corp*, 2013 FC 750 at para 424.

¹³⁰ *Monsanto v Janssens*, 2009 FC 318 at para 52, aff’d 2010 FCA 207.

¹³¹ *Monsanto Canada Inc v Rivett*, 2009 FC 317 at paras 80-82, aff’d 2010 FCA 207.

had he used the best non-infringing option: *Collette v. Lasnier* (1886), 13 S.C.R. 563, at p. 576, also referred to with approval in *Colonial Fastener Co. v. Lightning Fastener Co.*, [1937] S.C.R. 36.¹³²

90. As noted in *Rivett*, the “non-infringing option” referred to in *Schmeiser* is not simply anything that “one would have done had one complied with the law.”¹³³ Rather, a “non-infringing option” must be a true substitute for the patented invention to assess the profits attributable to the invention. In *Schmeiser*, for example, there were no profits attributable to the invention. On the revenue side, the identified non-infringing substitute (traditional canola) was no less profitable than infringing, genetically-modified canola because both types of seed (which was to be used as animal feed) sold for the same price. Nor had the defendant received any benefit from the invention because he had not applied the pesticide to which the patented crops were resistant. Consequently, this Court found that the “profits arose solely from qualities of their crop that cannot be attributed to the invention”¹³⁴ and ruled that no profits had to be disgorged.

91. In this Court’s decision in *Collette*, which is referenced in *Schmeiser* in support of the “differential profit” approach, it is also clear that the relevant comparison was to the best available substitute for, or non-infringing version of, the invention:

Moreover the estimate of the defendants’ profits if that had been shown to be the proper rule applicable to the case, does not appear to have been made by comparison of the profit obtainable by use of the plaintiff’s improved machine in making tapers, **with the latest precedent and best known mode of making them**, but comparison between the use of the plaintiff’s improvement and of very old mode of making tapers, which had, as is said, been improved upon by other modes before the plaintiff obtained patent for his improvement...¹³⁵

92. After *Schmeiser*, Canadian courts have consistently applied the differential profits approach, in both damages and profits cases, only where there is a “true substitute and thus a real alternative” to the patented invention.¹³⁶ The FCA stated in *Merck*:

[73] When considering the effect of legitimate competition from a defendant marketing a non-infringing alternative, a court is required to consider **at least** the following

¹³² *Monsanto Canada Inc v Schmeiser*, 2004 SCC 34 at para 102.

¹³³ *Monsanto Canada Inc v Rivett*, 2009 FC 317 at para 56, aff’d 2010 FCA 207.

¹³⁴ *Monsanto Canada Inc v Schmeiser*, 2004 SCC 34 at para 104.

¹³⁵ *Collette v Lasnier*, [1886] 13 SCR 563 at 576 [emphasis added].

¹³⁶ See *Apotex Inc v ADIR*, 2020 FCA 60 at paras 48-60, leave to appeal to SCC refused, 39172 (24 September 2020).

questions of fact:

i) Is the alleged non-infringing alternative a **true substitute and thus a real alternative?** [...] ¹³⁷

93. Likewise, in *Eli Lilly*, the FCA stated:

[54] ... [T]he very first issue to be considered by any court when determining whether an NIA defence is available: “Is the alleged NIA a **true alternative to the invention at issue?**” ... this is a very important question that usually turns on whether the product at issue would be considered a **true substitute by the consumer.** ¹³⁸

94. Although *Merck* and *Eli Lilly* involved claims for compensatory damages, the approach taken by the FCA in both cases was founded on this Court’s decision in *Schmeiser* – a profits case. The principle that a non-infringing alternative must be a true substitute for the infringing wares has also been consistently applied in accounting of profits cases. As noted by the FCA in *ADIR #2*:

[40] The Supreme Court has observed that where a patentee has elected to receive an accounting of profits, the patentee will only be entitled to that portion of the infringer’s profits that is causally attributable to the invention: *Schmeiser*, above at para. 101. This is because **a patent does not confer a complete monopoly** if a defendant could make or sell **a non-infringing version of the patented invention:** [*Merck*], above at para. 48. ¹³⁹

95. Similarly, in *Frac Shack*, the FCA upheld the rejection of a proposed non-infringing alternative because it was not a “true substitute” for the infringing apparatus since there was no evidence that “clients who contracted for the use of [the infringing] apparatus would have been equally willing to have allowed” the defendant to use the alleged non-infringing alternative. ¹⁴⁰

96. Overall, Nova has not referenced a single decision in support of its broad “opportunity cost” approach to differential profits, and its approach is clearly contrary to all earlier decisions of this Court, the FC, and the FCA – including decisions on which Nova relies.

¹³⁷ *Apotex Inc v Merck & Co*, [2015 FCA 171](#) at para 73 [emphasis added], leave to appeal to SCC refused, [36655](#) (14 April 2016).

¹³⁸ *Apotex Inc v Eli Lilly and Company*, [2018 FCA 217](#) at para 54 [emphasis added], leave to appeal to SCC refused, [38485](#) (23 May 2019).

¹³⁹ *Apotex Inc v ADIR*, [2020 FCA 60](#) at para 40 [emphasis added], leave to appeal to SCC refused, [39172](#) (24 September 2020).

¹⁴⁰ *AFD Petroleum Ltd v Frac Shack Inc*, [2018 FCA 140](#) at para 64.

(v) **Nova adopted the same interpretation of *Schmeiser* for which it now criticizes the FCA**

97. While Nova criticizes the FCA for interpreting *Schmeiser* to require a non-infringing “alternative” to the patented product, Nova adopted this very same interpretation at trial and before the FCA. At trial, Nova conceded that it had no actual substitute for any SURPASS customers, and therefore that the *Schmeiser* differential profits approach was not applicable.¹⁴¹ Nova again confirmed this position when it told the FCA that “[a]ll parties agreed that the differential profits method **was not the appropriate method in this case**” for dealing with the alleged opportunity costs of Commodity Pail and Crate.¹⁴²

98. Nevertheless, Nova now criticizes the FCA for agreeing with Nova’s prior, correct, application of *Schmeiser*, arguing that “[t]he majority gave no reason why it replaced *Schmeiser*’s “non-infringing option” (**which can be anything the infringer would have done without infringing**) with the more technical and narrow “non-infringing alternative” (which means a consumer substitute).”¹⁴³

(vi) **The value-based apportionment approach**

99. Nova also claims that the FCA “dramatically narrowed the circumstances in which a deduction or apportionment is permitted,” but fails to explain how the FCA’s explanation of the doctrine of apportionment differs in any way from prior case law or its application.¹⁴⁴ “Apportionment” allows the court to apportion profits between infringing and non-infringing components of a product where the non-infringing components are found as a fact to have contributed to the market demand for the product. It typically arises where the invention is sold as part of a larger product, and the court must determine “the value of the patented part to the machine as a whole”.¹⁴⁵ Rouleau J. of the Federal Court stated the test for apportionment as follows:

¹⁴¹ Extract from Reference Trial Transcript Dec 5, 2016 (Nova’s opening statement) at 69:27-70:6, RR, Tab 2.

¹⁴² Nova’s Responding Factum on Cross-Appeal at paras 29, 36-37 [emphasis added], RR, Tab 17.

¹⁴³ Factum of the Appellant at para 37 [emphasis added].

¹⁴⁴ Factum of the Appellant at para 36.

¹⁴⁵ *Beloit Canada Ltée/Ltd v Valmet Oy* (1994), 55 CPR (3d) 433 (FCTD) at 457, RBOA, Tab 3 [*Beloit*], rev’d on other grounds in *Beloit Canada Ltée/Ltd v Valmet Oy* (1995), 61 CPR (3d) 271

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*.¹⁴⁶

100. Nova provides the example of an infringing steering wheel sold as part of an entire car. Since the car sales may be attributable to features other than the infringing steering wheel, it is appropriate to apportion out the profits attributable to the steering wheel from those attributable to non-infringing aspects of the car. However, if one sells the patented product by itself – i.e., the infringing steering wheel alone – there is nothing to apportion. As held by the FCA, apportionment does not apply where, as in this case, the “the patent comprise[s] the whole of what was sold by the appellant to its customer[s].”¹⁴⁷

101. The FCA decision accurately summarizes the cases in which apportionment has been applied, all of which are cases in which (1) the invention only covered part of the product as sold by the defendant and (2) market demand was not driven solely by the invention,¹⁴⁸ unlike the case here where the Dow 705 patent covers Nova’s entire product.

102. Additionally, in the Australian *Dart* decision, referenced above and on which Nova relied in support of its ultimate successful request for full cost accounting, the plaintiff was awarded the defendant’s full profits from not only the patented product itself (container lids with a “press button closure”), but also from the non-patented containers on which they fit because “[i]t was the press

(FCA), RBOA, Tab 4. In *Beloit*, an apportionment was applied where the patent covered one piece of a four-piece paper making machine, and there was no evidence that the patented piece drove market demand for the overall machine.

¹⁴⁶ *Beloit Canada Ltée/Ltd v Valmet Oy* (1994), 55 CPR (3d) 433 (FCTD) at 457, RBOA, Tab 3 [emphasis added]. This statement of the apportionment test was recently affirmed by the FCA in *Apotex Inc v ADIR*, 2017 FCA 23 at para 73, and also cited with approval by the FCA majority in *FCA Reasons* at para 52, AR, Vol. I, Tab 5, p. 203.

¹⁴⁷ *Reading & Bates Construction Co v Baker Energy Resources Corp*, (1994), [1995] 1 FC 483 at para 28 (FCA) (WL), ABOA, Tab 7, leave to appeal to SCC refused, 24485 (1 June 1995) (WL), RBOA, Tab 13; see also *Teledyne Industries Inc v Lido Industrial Products Ltd* (1982), 68 CPR (2d) 204 (FCTD) at 214, RBOA, Tab 14.

¹⁴⁸ *FCA Reasons* at para 54, AR, Vol. I, Tab 5, pp. 204-205.

button closure which alone **created the market** for these bases.”¹⁴⁹

103. Nova cannot point to any case where “apportionment” was applied to attribute some of the profits made from the sale of the patented product to the possible, and hypothetical, sale of one of the raw materials, whether alone or as part of some other product.

104. Absent a non-infringing option or appropriate basis for apportionment, Canadian law requires an infringer to “**turn over all profit less legitimate expenses incurred,**” which is determined by “calculating the gross revenues from infringement and deducting the incremental costs of earning that revenue.” This approach has been unanimously applied in cases, such as this one, where the patent was fundamental to the thing sold.¹⁵⁰

105. Nova relies extensively (and solely) on Professor Siebrasse’s broad view of the term “non-infringing option.” Notably, although Professor Siebrasse’s current view is that any hypothetical opportunity for alternative profits should be deductible, he made no such claim in the 2004 article cited by this Court in *Schmeiser* in support of the differential profits approach.¹⁵¹ Indeed, in all the cases and examples of non-infringing alternatives referenced in that article, an actual substitute for the invention was required. Further, the article cites with approval U.S. jurisprudence (discussed below) that similarly finds that only **substitutes for the invention** are relevant to a differential profits approach. Professor Siebrasse’s current view is contrary to the case law, and also (as noted above) appears to be founded on other unrelated concerns about the patent system that should not be addressed by judicial weakening of the accounting of profits remedy.

(vii) Differential profits in the U.S.

106. In the U.S., the accounting of profits remedy is no longer available for patent infringement. But when it was, the differential profits approach was also used, and the analysis was focused on whether there was a non-infringing alternative that could have served as a true substitute for the

¹⁴⁹ *Re Decor Corporation Pty Ltd and Rian Tooling Industries Pty Ltd v Dart Industries Inc*, [1991] FCA 655 (Full Ct Aus) at para 25 [emphasis added], aff’d *Dart Industries Inc v Decor Corporation Pty Ltd*, [1993] HCA 54 (Aust HC) at paras 29-33.

¹⁵⁰ *Apotex Inc v H Lundbeck A/S*, 2013 FC 192 at paras 282-283 [emphasis added]; *Frac Shack Inc v AFD Petroleum Ltd*, 2017 FC 104 at paras 292, 294, aff’d 2018 FCA 140 at paras 62-64; *Varco Canada Ltd v Pason Systems Corp*, 2013 FC 750 at para 417.

¹⁵¹ Norman Siebrasse, “A Remedial Benefit-Based Approach to the Innocent-User Problem in the Patenting of Higher Life Forms,” (2004) 20 CIPR 79 at 97, ABOA, Tab 16.

invention in the market. As stated by the U.S. Supreme Court in *Manufacturing Co v Cowing* (a decision relied upon by Professor Siebrasse in his 2004 article cited by this Court in *Schmeiser*):

"The question to be determined . . . is, what advantage did the defendant derive from using the complainant's invention over what he had in using other processes then open to the public, **and adequate to enable him to obtain an equally beneficial result.**" [...] If...there is no other way open to the public of supplying the demand for that use, then it is clear the infringer has by his infringement **secured the advantage of a market he would not otherwise have had**, and that the fruits of this advantage are the entire profits he has made **in that market.**¹⁵²

107. This same approach to non-infringing alternatives continues to be applied in damages cases in the U.S. The leading *Panduit* test for lost profits damages requires the patentee to show, among other elements, an absence of "acceptable non-infringing substitutes." The Court in *Panduit* noted that "[a] product lacking the advantages of that patented can hardly be termed a substitute "acceptable" to the customer who wants those advantages."¹⁵³

108. Overall, Nova has pointed to no case law anywhere in the world at any time that applies differential profits in the absence of a non-infringing substitute, or where mere opportunity costs in respect of some other activity have been held to be deductible.

C. Nova's Claimed Deduction of an Artificial "Market Price" of Ethylene Should be Denied

109. The trial judge was correct to deduct only Nova's actual cost to produce the ethylene used to make SURPASS, rather than the higher hypothetical and unproven "market price" claimed by Nova, which he found was "a theoretical cost that Nova did not incur."¹⁵⁴ The FCA was also correct to not disturb the trial judge's fact-driven decision on this point.¹⁵⁵

110. In arriving at the final profits figure, the trial judge deducted Nova's full cost of making SURPASS. Pursuant to the trial judge's findings, Nova was entitled to deduct its costs associated with every acquired material and step of the process, including the purchase of ethane, and all

¹⁵² *Manufacturing Co v Cowing*, 105 US 253 (1882) at 255 [emphasis added], RBOA, Tab 11; See also *Crosby Valve Co v Safety Valve Co*, 141 US 441 (1891) at 452-454, RBOA, Tab 7.

¹⁵³ *Panduit Corp v Stahlin Bros Fibre Works, Inc*, 575 F 2d 1152 (6th Cir 1978) at 1162, RBOA, Tab 12) [*Panduit*].

¹⁵⁴ *FC Reasons* at para 139, AR, Vol. I, Tab 1, pp. 54-55.

¹⁵⁵ *FCA Reasons* at paras 114-120, AR, Vol. I, Tab 5, pp. 223-226.

expenses associated with operating its ethylene and polyethylene plants, all on a “full cost” basis.¹⁵⁶ Deducting these amounts from Nova’s SURPASS revenues, as the trial judge did and the FCA affirmed, leaves Nova’s actual infringing profits. Nova has not been “punished” by having to disgorge those profits to Dow. To the contrary, deducting anything more from Nova’s revenues would allow Nova to keep some of the profits from its infringing sales of SURPASS.

111. Nova’s claimed additional deduction for “ethylene profits” based on an alleged “market price” for ethylene is an artificial construct.¹⁵⁷ Nova did not earn “ethylene profits” by making the ethylene used in SURPASS. Nova made ethylene for SURPASS and incurred a cost in doing so. No profit was earned until SURPASS customers paid for the SURPASS. Nova seeks to deduct an artificially marked-up cost of ethylene and so retain some of those unlawful profits.

112. Nova notes that it cost less to make ethylene than to acquire it elsewhere, which Nova refers to as its “Alberta Advantage.”¹⁵⁸ However, as noted above, the fact that one infringer may be more or less efficient in engaging in the infringing conduct is of no moment.

113. Indeed, as held by the trial judge, an accounting of profits is based on the infringer’s actual revenues and costs, taking the infringer as he is.¹⁵⁹ A key prerequisite to deducting an expense is that it must have been “incurred.”¹⁶⁰ These principles are longstanding and well-established, and it must be presumed that Parliament fully understood them in including the equitable accounting remedy as one of the remedies available under the *Patent Act*.¹⁶¹ Nova’s hypothetical deduction theory would distort the remedy, rendering it unrecognizable from what Parliament intended, and incapable of protecting the exclusive rights provided for in the *Patent Act*.

114. In this Court, Nova now attempts to shoehorn its ethylene markup deduction theory into the differential profits approach from *Schmeiser*.¹⁶² This is also misplaced. As discussed above, Nova

¹⁵⁶ *FC Reasons* at para 140, AR, Vol. I, Tab 1, p. 55.

¹⁵⁷ Factum of the Appellant at paras 108-114; *FC Reasons* at para 139, AR, Vol. I, Tab 1, pp. 54-55.

¹⁵⁸ Factum of the Appellant at para 14.

¹⁵⁹ *FC Reasons* at paras 138-139, AR, Vol. I, Tab 1, pp. 54-55.

¹⁶⁰ *Strother v 3464920 Canada Inc*, 2007 SCC 24 at para 97 [emphasis added]; *Apotex Inc v H Lundbeck A/S*, 2013 FC 192 at para 283; *Rivett v Monsanto Canada Inc*, 2010 FCA 207 at para 7.

¹⁶¹ *Patent Act*, RSC 1985, c P-4, s 57.

¹⁶² Factum of the Appellant at paras 108-114.

conceded that it does not have a non-infringing alternative, and also **conceded** both before the Federal Court and FCA that it therefore could not rely on the differential profits approach from *Schmeiser* to deduct alleged profits from Commodity Pail and Crate – and indeed that it would be inappropriate to do so.¹⁶³ This view was correct: the jurisprudence is clear that absent a non-infringing option, all profits resulting from the infringement must be disgorged.

115. Nevertheless, Nova now rests its claim for deduction of an ethylene markup solely on the assertion that it would have, in a “but for” world, made profits from Commodity Pail and Crate and that in so doing Nova would have “recovered” its hypothetical markup on ethylene as part of the profits from the sale of those products.¹⁶⁴ This is clearly contrary to the law and directly contradicts Nova’s express concession in the courts below that it cannot deduct hypothetical profits from the sale of its Commodity Pail and Crate.¹⁶⁵

116. Further, while Nova claims that the ethylene markup it seeks to deduct reflects a “market price” of ethylene, this market price was not factually established for two reasons. First, the evidence suggested that Nova had no market demand for additional ethylene.¹⁶⁶ In other words, making SURPASS did not stop Nova from selling more ethylene. Had there been a demand for the ethylene, and more ethylene buyers, Nova could have, and would have, made and sold more ethylene regardless of its manufacture of SURPASS.

117. Second, the “price” Nova relies on is not actually a “market price.”¹⁶⁷ Nova simply attempts to rely upon an average price it calculated for the purposes of this proceeding based on certain long-term contracts it had with a handful of customers, each with different terms and pricing.¹⁶⁸

118. Indeed, on this appeal, Nova has abandoned the assertion that it could have sold the ethylene used in SURPASS in the market *per se*. Nevertheless, despite having abandoned the only

¹⁶³ Nova’s Responding Factum on Cross-Appeal at paras 29, 36-37, RR, Tab 17.

¹⁶⁴ Factum of the Appellant at paras 104-114.

¹⁶⁵ Soriano Report at paras 77(d), 127, RR, Tab 11; Extract from Reference Trial Transcript, Dec 5, 2016 (Nova opening statement) at 69:27-70:6, RR, Tab 2.

¹⁶⁶ Extract from Reference Trial Transcript, Dec 16, 2016 (Heeb cross) [CONF] at 1787:22-1790:16, 1796:5-1798:10, RR, Tab 5; Extract from Reference Trial Transcript, Dec 15, 2016 (Vermani cross) [CONF] at 1526:11-14, RR, Tab 4; Nova’s Ethylene Plant Capacity (Trial Exhibit PR253, Tab 1) [CONF], RR, Tab 12.

¹⁶⁷ *FC Reasons* at para 139, AR, Vol. I, Tab 1, pp. 54-55.

¹⁶⁸ *FCA Reasons* at paras 92, 95, AR, Vol. I, Tab 5, pp. 216-217

underlying factual claim that could provide a foundation for determining how much “ethylene profit” Nova claims it would have hypothetically earned from the sale of its Commodity Pail and Crate, Nova inexplicably continues to seek deduction of this purported “market price.” The lack of factual basis for the “market price” is, by itself, fatal to Nova’s argument.

119. Further, contrary to Nova’s submissions, the trial judge did not conclude that Nova would be able to recover its hypothetical ethylene markup from the sale of its Commodity Pail and Crate.¹⁶⁹ The trial judge made no factual findings establishing that the hypothetical profits, if any, from “pail and crate” polyethylene would have covered both the ethylene markup that Nova now seeks in addition to the non-incremental fixed costs that Nova already deducted on account of such hypothetical sales. Thus, Nova’s argument also fails on the facts.

120. Moreover, the trial judge’s award of full cost accounting has already given Nova all the benefit to which it was entitled from the hypothetical manufacture of its Commodity Pail and Crate. The trial judge awarded full cost accounting based on the premise that if Nova had not infringed, it would have instead used the ethylene in question to make that very same Commodity Pail and Crate to keep its polyethylene plant used to make SURPASS (its PE2 plant) running at full capacity. According to the trial judge, this would have allowed Nova to cover its full costs (including non-incremental costs) associated with the PE2 plant.¹⁷⁰ Having received the substantial benefit of using full cost accounting based on hypothetical sales of Commodity Pail and Crate, it is legally and factually baseless for Nova to now claim that the FC erred in refusing to permit an additional deduction for an artificial markup on the ethylene based on the sale of those same products. The trial judge’s refusal to allow this is entirely consistent with Nova’s own submissions at trial and *Dart*, where the Australian High Court awarded full cost accounting, but confirmed that opportunity costs could not also be deducted.¹⁷¹

121. Notably, Nova’s position before this Court is diametrically opposed to the position it took regarding its ethylene costs when engaging the Australian government in response to an allegation that Nova was “dumping” (selling at a loss) polyethylene in Australia. In particular, Nova argued that its ethylene and polyethylene production must be viewed as an “integrated business model,”

¹⁶⁹ Factum of the Appellant at para 25.

¹⁷⁰ *FC Reasons* at para 158-165, AR, Vol. I, Tab 1, pp. 60-64.

¹⁷¹ *Dart Industries Inc v Decor Corporation Pty Ltd*, [1993] HCA 54 at paras 14-15 (Aust HC).

whose profitability must be assessed based on Nova's "actual cost of ethylene" (which because of its low cost would permit Nova to properly sell its polyethylene in Australia at a lower price). Nova's representations to the Australian customs authorities are particularly instructive:

Customs fails to understand the NOVA integrated business model ... NOVA manages its business by optimizing its chain margin (ethylene plus polyethylene margin in total). **Customs should use NOVA's actual cost of ethylene, as opposed to transfer costs, as this would properly reflect NOVA's actual costs to produce LLDPE.**¹⁷²

122. Finally, deference is owed to the trial judge on his factual findings of causation, and his resulting conclusions as to the appropriate deductions for ethylene based on the facts. The trial judge found a causal link between the infringement and the awarded SURPASS profits, and found that Nova's claim to deduct a "market price" of ethylene was best characterized as one for deduction of hypothetical costs it did not actually incur.¹⁷³ The FCA properly deferred to these findings on causation, and it is respectfully submitted that the same standard of review applies in this Court.¹⁷⁴

(i) Dissent of Woods J.

123. While Woods J. dissented, her dissent was not on legal principle (on which she agreed with the majority), but rather on matters of mixed fact and law, and she was mistaken on key facts. Notably, her dissent was not based on the extended version of "differential profits" that Nova now argues before this Court. Rather, it was based on a mistaken application of the doctrine of apportionment.

124. In particular, Woods J. misconstrued the invention as a process patent, leading her to misapply the English Patent Court's decision in *Celanese*, and attempt to divide the SURPASS profits between an "infringing process (the manufacture of polyethylene using ethylene)" and a "non-infringing process (the production of ethylene)."¹⁷⁵ However, this is factually incorrect. The

¹⁷² Nova's Letter to Australian Customs & Border Protection Service, Nov 2, 2009 (Trial Exhibit PR287) at 2 [emphasis added], RR, Tab 13. Nova's submission was not ultimately accepted by the Australian government as being "unverified". However, this is irrelevant; what is relevant in respect of the above submission is how Nova views its cost of ethylene: Extract from Reference Trial Transcript, Dec 22, 2016 (Leonard cross) [CONF] at 2505:23-2506:14, 2547:7-2547:22, RR, Tab 6.

¹⁷³ *FC Reasons* at paras 139-140, AR, Vol. I, Tab 1, pp. 54-55.

¹⁷⁴ *FCA Reasons* at paras 94-95, AR, Vol. I, Tab 5, p. 217.

¹⁷⁵ *FCA Reasons* at paras 196, AR, Vol. I, Tab 5, p. 246.

infringed claims of the 705 Patent were for compositions – i.e., the final product **regardless of what process is used to make it**. Nova infringed by making the patented compositions and selling them to others, not by using a particular process. As noted by the majority:

The fact that NOVA used a non-infringing way to make a raw material that is fully incorporated and merged into the protected polymers is beside the point: it earned a sizeable gain from infringing Dow’s patent by making and selling the protected polymers[...]¹⁷⁶

125. Additionally, the U.K. *Celanese* decision addressed a different situation: in *Celanese* the patent did not cover the final product, it only covered a single step in an intermediate process used to make a non-patented, final product (acetic acid).¹⁷⁷ Laddie J. discussed a method of apportioning profits in a case where a product is made in a multi-stage process, only one stage of which is infringing.¹⁷⁸ His discussion is irrelevant in this case because the patent claims cover the novel product as sold, not one stage in a multi-stage process.

126. It is also worth noting that the apportionment method described in *Celanese* has never been applied in Canada. In *Celanese*, the U.K. court applies “cost-based apportionment,” which apportions profits according to the relative cost to the infringer of implementing the infringing (patented) process versus the other non-patented stages in the multi-stage process used to make the acetic acid.¹⁷⁹ As the FCA majority notes, Canadian law favours “value-based apportionment” where applicable – looking at the value of the invention to the overall profit of the product sold.¹⁸⁰

D. No Error in Award of Springboard Profits

127. Springboard profits are the defendant’s post-expiry profits that are causally connected to its pre-expiry infringing activity. Because Nova built its SURPASS customer base pre-expiry through

¹⁷⁶ *FCA Reasons* at para 119, AR, Vol. I, Tab 5, p. 225.

¹⁷⁷ *Celanese International Corp v BP Chemicals Ltd*, [1999] RPC 203 at paras 13-14 (Pat Ct) (WL) [*Celanese*], ABOA, Tab 1, p. 12.

¹⁷⁸ *Celanese International Corp v BP Chemicals Ltd*, [1999] RPC 203 at paras 42-46 (Pat Ct) (WL), ABOA, Tab 1.

¹⁷⁹ Professor Siebrasse was highly critical of the costs-based apportionment approach adopted by the court in *Celanese*: Norman Siebrasse, “A Remedial Benefit-Based Approach to the Innocent-User Problem in the Patenting of Higher Life Forms,” (2004) 20 CIPR 79 at 88, 90, 103-106, ABOA, Tab 16; *Celanese International Corp v BP Chemicals Ltd*, [1999] RPC 203 at paras 80-84 (Pat Ct) (WL), ABOA, Tab 1.

¹⁸⁰ *FCA Reasons* at paras 50-55, AR, Vol. I, Tab 5, pp. 207-208.

infringement, its post-expiry sales were higher than if it had waited until expiry to start selling SURPASS, and Nova admitted this fact.¹⁸¹ As such, the increased post-expiry profits resulting from this “springboard” effect were on the facts properly subject to disgorgement.

128. In the courts below, Nova argued that springboard profits are not allowable because they are deemed to be “condoned.”¹⁸² Both courts below rejected this argument. On this appeal, Nova abandons that argument, and simply takes the position that it is contrary to “policy” to award profits that occur post-expiry. Nova’s position is without merit.

129. As held by the trial judge, springboard profits are nothing more than “a type of [profit] to be proven with evidence.”¹⁸³ They flow from the general principle that all profits resulting from the infringement are to be disgorged.¹⁸⁴ An accounting of profits is intended to strip “benefits obtained by infringers as a result of the infringement, no more, no less.”¹⁸⁵ There is nothing special about springboard profits that would require a departure from this principle as a matter of public policy.¹⁸⁶ Indeed, allowing infringers to retain the benefit of pre-expiry ramp up would undermine the exclusive right granted to the patentee upon which the patent system is based and would incentivize competitors to engage in infringing activities prior to patent expiry to gain post-expiry advantages.

130. The jurisprudence has recognized that springboarding is an interference with the patentee’s exclusive right, and thus has granted springboard damages. In *Merck FC*, the court recognized a patentee’s right to recover for post-expiry losses attributable to the infringement, stating:

There is nothing in the *Patent Act* that limits damages to those sustained during the life of the patent. [...] Merck is entitled to its damages for infringing sales even though

¹⁸¹ Nova Closing at para 263, RR, Tab 15.

¹⁸² *FC Reasons* at para 115, AR, Vol. I, Tab 1, p. 46; *FCA Reasons* at para 132, AR, Vol. I, Tab 5, p. 229.

¹⁸³ *FC Reasons* at paras 120, 124, AR, Vol. I, Tab 1, pp. 48-49.

¹⁸⁴ *FC Reasons* at para 27, AR, Vol. I, Tab 1, p. 194.

¹⁸⁵ *FC Reasons* at para 27, AR, Vol. I, Tab 1, p. 194.

¹⁸⁶ *AstraZeneca Canada Inc v Apotex Inc*, 2015 FC 671 at para 7, varied on other grounds 2017 FCA 7, leave to appeal to SCC refused, 37478 (1 June 2017).

those sales actually would take place during the post-expiry period.¹⁸⁷

131. In *Janssen* the court awarded springboard damages, stating:

As Justice Snider held in [*Merck FC*], a claimant is entitled to damages sustained after [...] the patent has expired in respect of losses that were incurred as a result of the infringer's activity during the period when the patent was in force.¹⁸⁸

132. The FCA also accepted the availability of springboard remedies in *Eli Lilly*, stating:

In effect, the loss of certain sales can be claimed as a loss within the meaning of subsection 55(1) of the Patent Act – even if they are sales of non-infringing products (the ramp-up or springboard effect) or sales of non-infringing components of products – where the court finds that, as a fact, those lost sales arose as a result of the sales of infringing products or because of infringing components.¹⁸⁹

133. Springboard damages have also been recognized in the UK and the US.¹⁹⁰

134. There is also no principled reason why an accounting of profits should not take springboarding into account. The nature of the interference with the patentee's exclusive rights is the same, regardless of whether the profits or damages remedy is being applied, as confirmed by the Scottish High Court in *Bayer Cropscience*,¹⁹¹ which appears to be the only other case to specifically address the issue in the context of an accounting.

135. In this case, because Nova built its SURPASS customer base pre-expiry through infringement, its post-expiry sales were **admittedly** higher than if it had waited until expiry to start

¹⁸⁷ *Merck & Co v Apotex Inc*, 2013 FC 751 at para 183 [*Merck FC*], aff'd 2015 FCA 171, leave to appeal to SCC refused, 36655 (14 April 2016). The court ultimately did not award springboard damages in *Merck FC* on procedural and evidentiary grounds. See also *Bristol-Myers Squibb v Apotex*, 2001 FCT 1086 at para 22 (FCTD).

¹⁸⁸ *Janssen Inc v Teva Canada Ltd*, 2016 FC 593 at paras 109-112 [*Janssen*], aff'd 2018 FCA 33, leave to appeal SCC refused, 38033 (8 November 2018).

¹⁸⁹ *Apotex Inc v Eli Lilly and Company*, 2018 FCA 217 at para 114, leave to appeal to SCC refused, 38485 (23 May 2019).

¹⁹⁰ *BIC Leisure Prods, Inc v Windsurfing Int'l, Inc*, 687 F Supp 134 at 138 (SDNY 1988), RBOA, Tab 5; *Gerber Garment Technology Inc v Lectra Systems Ltd et al*, [1995] RPC 383 at 402-403, 418, RBOA, Tab 8, aff'd [1997] RPC 443 at 450, 455-456, RBOA, Tab 9.

¹⁹¹ *Bayer Cropscience KK v Charles River Laboratories Preclinical Services Edinburgh Ltd*, [2010] CSOH 158 at paras 7-14 [*Bayer Cropscience*], RBOA, Tab 1, citing *Gerber Garment Technology Inc v Lectra Systems Ltd et al*, [1995] RPC 383, RBOA, Tab 8, aff'd [1997] RPC 443, RBOA, Tab 9. Note that *Gerber* has been favorably cited in Canada in *Bayer Healthcare AG v Sandoz Canada Incorporated*, 2007 FC 352 at para 56.

selling SURPASS.¹⁹² The increased post-expiry profits resulting from this “springboard” effect should be subject to disgorgement. Otherwise, infringers will be incentivized to interfere with the patentee’s exclusive right pre-expiry for the prospect of the resulting post-expiry gain.

136. Nova further argues that springboard profits are inappropriate because Nova first ramped up SURPASS in 2002, from which Dow benefitted through reasonable compensation for pre-patent-grant infringement and recovery of profits during patent term.¹⁹³ This argument is flawed for several reasons.

137. First, pursuant to section 55(2) of the *Patent Act*, Dow was entitled to recover “reasonable compensation” for the sales that Nova made in 2004-2006 prior to the grant of the patent. But, Section 55(2)’s remedy is in addition to, not in lieu of, section 55(1), which pertains to post-grant infringing activity. Under section 55(2), the trial judge awarded reasonable royalties for infringing sales predating issuance of patent.¹⁹⁴ Those sales are not subject to the accounting of profits remedy provided by section 55(1), which applied only to post-grant infringement. In any event, Nova cannot claim the benefit of infringing sales to immunize itself from the disgorgement of springboard profits that flowed from additional infringing sales.

138. Second, Nova’s argument confuses the springboard advantage achieved through pre-expiry infringement with the profits earned from pre-expiry sales. Springboard profits are an *additional* post-expiry benefit from the customer base Nova built up from its pre-expiry infringement. Disgorgement of these profits is required to ensure that all profits derived from the pre-expiry infringement are accounted for. If Nova had not infringed, it would have earned none of the profits it actually made from pre-expiry infringing sales *and* none of the profits it earned post-expiry from the springboard effect.

139. Third, both parties’ evidence at trial was premised on the assumption that Nova could not legally sell SURPASS until patent expiry in 2014. Nova did not adduce any evidence suggesting that sales of SURPASS during the pre-issue reasonable compensation period from 2002-2006 were relevant to the quantification of its post-expiry springboard profits in 2014-2015. Nova cannot now

¹⁹² Nova Closing at para 263, RR, Tab 15.

¹⁹³ Factum of the Appellant at paras 124-126.

¹⁹⁴ *FC Reasons* at para 64, AR, Vol. I, Tab 1, p. 30.

baldly assert on appeal without any supporting evidence that those pre-issue sales are relevant.

140. Nova also presents another new position on how springboard profits should be calculated, namely that its hypothetical ethylene markup should be deducted during the springboard period.¹⁹⁵ However, there is no relevant distinction in principle between how springboard and pre-expiry profits should be assessed – both are causally attributable to the infringement and should be treated the same way, so as to deprive the infringer of all causally connected profits, and thus protect the patentee’s exclusive right.

141. Overall, Nova has failed to identify any legal error in awarding springboard profits, nor any palpable and overriding error in how it was applied in this case.

IV – SUBMISSIONS REGARDING COSTS

142. Dow submits it should be awarded its costs of this appeal.

V – ORDER SOUGHT

143. Dow respectfully requests that the appeal be dismissed with costs.

VI – SUBMISSIONS ON CONFIDENTIAL INFORMATION

144. Dow’s factum does not include any confidential information. Dow’s record includes documents marked as confidential pursuant to the protective order in these proceedings.¹⁹⁶ These confidential documents are redacted in the public version of Dow’s record. Dow respectfully submits that such confidential information should not form any part of the Court’s reasons, if any, in the appeal.

Date: October 12, 2021

ALL OF WHICH IS RESPECTFULLY SUBMITTED

D. S. Davies

SMART & BIGGAR LLP
Solicitors for the Respondents

¹⁹⁵ Factum of the Appellant at paras 127-131.

¹⁹⁶ Protective Order of Prothonotary Milczynski, dated June 21, 2011, AR, Vol. II, Tab 7; Order of Prothonotary Milczynski, dated March 11, 2013, AR, Vol. II, Tab 8.

VII – TABLE OF AUTHORITIES

CASES	Cited in paras.
<i>AFD Petroleum Ltd v Frac Shack Inc</i> , 2018 FCA 140	83, 95, 104
<i>Apotex Inc v ADIR</i> , 2017 FCA 23	99
<i>Apotex Inc v ADIR</i> , 2020 FCA 60	6, 54, 72, 92, 94
<i>Apotex Inc v Eli Lilly and Company</i> , 2018 FCA 217	6, 93, 132
<i>Apotex Inc v H Lundbeck A/S</i> , 2013 FC 192	83, 104
<i>Apotex Inc v Merck & Co</i> , 2015 FCA 171	6, 92, 130
<i>Apotex Inc v Wellcome Foundation Ltd</i> , 2002 SCC 77	69, 71
<i>AstraZeneca Canada Inc v Apotex Inc</i> , 2015 FC 671	18, 129
<i>AstraZeneca Canada Inc v Apotex Inc</i> , 2017 SCC 36	69, 70
<i>Atlantic Lottery Corp Inc v Babstock</i> , 2020 SCC 19	74
<i>Bayer Cropscience KK v Charles River Laboratories Preclinical Services Edinburgh Ltd</i> , [2010] CSOH 158 (Scott C Sess), RBOA, Tab 1	134
<i>Bayer Healthcare AG v Sandoz Canada Incorporated</i> , 2007 FC 352	134
<i>Beloit Canada Ltée/Ltd v Valmet Oy</i> (1992), 45 CPR (3d) 116 (FCA), RBOA, Tab 2	17
<i>Beloit Canada Ltée /Ltd v Valmet Oy</i> (1994), 55 CPR (3d) 433 (FCTD), RBOA, Tab 3	99
<i>Beloit Canada Ltée/Ltd v Valmet Oy</i> (1995), 61 CPR (3d) 271 (FCA), RBOA, Tab 4	99
<i>BIC Leisure Prods, Inc v Windsurfing Int’l, Inc</i> , 687 F Supp 134 (SDNY 1988), RBOA, Tab 5	133
<i>Bristol-Myers Squibb v Apotex</i> , 2001 FCT 1086	130
<i>Cadbury Schweppes Inc v FBI Foods Ltd</i> , [1999] 1 SCR 142	75
<i>Cambria Iron Co v Carnegie Steel Co</i> , 224 F 947 (3d Cir 1915) (WL), RBOA, Tab 6	54

CASES	Cited in paras.
<i>Celanese International Corp v BP Chemicals Ltd</i> , [1999] RPC 203 at 211 (Pat Ct), ABOA, Tab 1	125, 126
<i>Collette v Lasnier</i> , [1886] 13 SCR 563 (SCC)	6, 91
<i>Crosby Valve Co v Safety Valve Co</i> , 141 US 441 (1891), RBOA, Tab 7	106
<i>Dart Industries Inc v Decor Corporation Pty Ltd</i> , [1993] HCA 54 (Aust HC)	13, 38, 102, 120
<i>Dow Chemical Co v Nova Chemicals Corp</i> , 2014 FC 844	22, 25, 26
<i>Dow Chemical Co v Nova Chemicals Corp</i> , 2017 FC 350	8, 11, 12, 17, 19, 24, 25, 27, 28, 30, 32, 33, 34, 41, 42, 43, 44, 56, 109, 110, 111, 113, 117, 120, 122, 128, 129, 137
<i>Dow Chemical Co v Nova Chemicals Corp</i> , 2017 FC 637	28
<i>Frac Shack Inc v AFD Petroleum Ltd</i> , 2017 FC 104	83, 104
<i>Free World Trust c Électro Santé Inc</i> , 2002 SCC 66	69, 70
<i>Gerber Garment Technology Inc v Lectra Systems Ltd et al</i> , [1995] RPC 383, RBOA, Tab 8	133, 134
<i>Gerber Garment Technology Inc v Lectra Systems Ltd et al</i> , [1997] RPC 433, RBOA, Tab 9	133, 134
<i>Janssen Inc v Teva Canada Ltd</i> , 2016 FC 593	131
<i>LED Builders Pty Ltd v Eagle Homes Pty Ltd</i> , [1999] FCA 584 (FC Australia)	85
<i>LED Builders Pty Ltd v Eagle Homes Pty Ltd</i> , [1999] FCA 1141 (FC Australia)	85
<i>Livingston v Woodworth</i> , 56 US 546 (1853), RBOA, Tab 9	84
<i>Lubrizol Corp v Imperial Oil Ltd</i> , [1997] 2 FC 3 (FCA) (WL), ABOA, Tab 6	38
<i>Manufacturing Co v Cowing</i> , 105 US 253 (1882), RBOA, Tab 11	106

CASES	Cited in paras.
<i>Merck & Co v Apotex Inc</i> , 2013 FC 751	130
<i>Monsanto v Janssens</i> , 2009 FC 318	10, 87
<i>Monsanto Canada Inc v Rivett</i> , 2009 FC 317	53, 54, 74, 87, 90
<i>Monsanto Canada Inc v Schmeiser</i> , 2004 SCC 34	3, 89, 90
<i>Nova Chemicals Corp v Dow Chemical Co</i> , 2016 FCA 216	22, 26,
<i>Nova Chemicals Corporation v. Dow Chemical Company</i> , 2020 FCA 141	6, 10, 11, 19, 23, 47, 48, 50, 51, 52, 53, 55, 56, 57, 58, 59, 60, 61, 66, 68, 74, 76, 77, 80, 101, 109, 117, 122, 124, 126, 128
<i>Panduit Corp v Stahlin Bros Fibre Works, Inc</i> , 575 F 2d 1152 (6th Cir 1978), RBOA, Tab 12	107
<i>Pfizer Canada Inc v Novapharm Ltd</i> , 2012 SCC 60	70
<i>Reading & Bates Construction Co v Baker Energy Resources Corp</i> (1994), [1995] 1 FC 483 (FCA) (WL), ABOA, Tab 7	100
<i>Reading & Bates Construction Co v Baker Energy Resources Corp</i> , 24485 (1 June 1995) (WL), RBOA, Tab 13	100
<i>Re Decor Corporation Pty Ltd and Rian Tooling Industries Pty Ltd v Dart Industries Inc</i> , [1991] FCA 655 (Full Ct Aus)	102
<i>Rivett v Monsanto Canada Inc</i> , 2010 FCA 207	10, 53, 64, 74, 87, 90, 113
<i>Seedlings Life Science Ventures, LLC v Pfizer Canada ULC</i> , 2021 FCA 154	82, 90
<i>Strother v 3464920 Canada Inc</i> , 2007 SCC 24	71, 73, 83
<i>Teledyne Industries Inc v Lido Industrial Products Ltd</i> (1982), 68 CPR (2d) 204 (FCTD), RBOA, Tab 14	100

CASES	Cited in paras.
<i>Teva Canada Limited v. Janssen Inc.</i> , 2018 FCA 33	131
<i>Varco Canada Limited v Pason Systems Corp.</i> , 2013 FC 750	54, 81, 83, 86, 104

SECONDARY SOURCES	Cited in paras.
Christopher B Seaman <i>et al.</i> , “ Lost Profits and Disgorgement ” in C Bradford Biddle <i>et al.</i> , eds, <i>Patent Remedies and Complex Products: Toward a Global Consensus</i> (Cambridge: Cambridge University Press, 2019)	38
Norman Siebrasse, “A Remedial Benefit-Based Approach to the Innocent-User Problem in the Patenting of Higher Life Forms,” (2004) 20 CIPR 79, ABOA, Tab 16	105, 126
Norman Siebrasse, “Nova v Dow: A Radical Departure from Established Law,” (6 October 2020), online (blog), accessible here : <i>Sufficient Description</i>	82

STATUTORY PROVISIONS	Cited in paras.
<i>Patent Act</i> , RSC 1985, c P-4, ss 42 and 57	74, 113

Court File No. 37274
(A-379-14)

IN THE SUPREME COURT OF CANADA
(ON APPEAL FROM
THE FEDERAL COURT OF APPEAL)

BETWEEN:

NOVA CHEMICALS CORPORATION
Appellant

AND:

THE DOW CHEMICAL COMPANY,
DOW GLOBAL TECHNOLOGIES INC. and
DOW CHEMICAL CANADA ULC
Respondents

FACTUM OF THE RESPONDENTS
THE DOW CHEMICAL COMPANY et al.
(Pursuant to Rules 42 of the *Rules of the Supreme*
***Court of Canada*)**

SMART & BIGGAR LLP
55 Metcalfe St., Suite 900
P.O. Box 2999, Station "D"
Ottawa, Ontario K1P 6L5

Steven B. Garland
Jeremy E. Want
Daniel S. Davies

Tel: (613) 232-2486
Fax: (613) 232-8440

Counsel for the Respondents