Federal Court Cour fédérale

Date: 20230706

Docket: T-127-19

Citation: 2023 FC 925

Ottawa, Ontario, July 6, 2023

PRESENT: Mr. Justice Sébastien Grammond

BETWEEN:

FROMFROID SA

Plaintiff

and

1048547 ONTARIO INC
FRIMASCO INC

Defendants

PUBLIC JUDGMENT AND REASONS

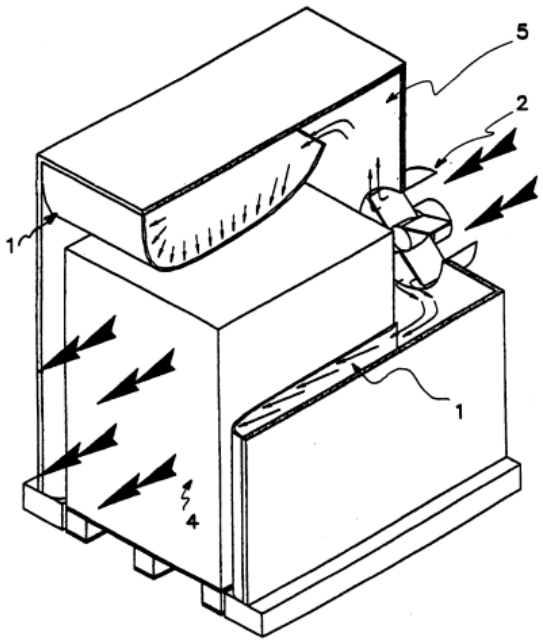
[1] In this patent infringement case, the main issue is whether the Defendants built and used the Plaintiff's invention before or after the patent expired. Although the evidence is circumstantial, it supports the presumption that an infringing copy of the invention was made before the patent expired, contrary to the Defendants' claims. I therefore order the Defendants to pay compensatory and punitive damages.

I. Background

[2] The Plaintiff, Fromfroid SA [Fromfroid], is a French corporation specializing in the manufacture and installation of air-conditioning and refrigeration equipment for the agri-food industry. Fromfroid holds Canadian Patent No 2,301,753 [the 753 patent], which covers a rapid cooling ventilation system for food products.

[3] Basically, the system covered by the 753 patent consists of a tunnel lined with tarpaulins that inflate with air blown by a fan. When they inflate, the tarpaulins press against the pallet of products to be refrigerated, which is placed in the centre of the tunnel. In so doing, they force the stream of cold air to pass between the containers of products instead of going around the pallet, which ensures more rapid cooling.

[4] Figure 2 from the patent makes it possible to quickly grasp how the invention works:



[5] The 753 patent expired on July 30, 2018.

[6] The Defendant, 1048547 Ontario Inc, better known under the name Skotidakis, operates a milk and cheese products business in Saint-Eugène, Ontario. In 2014, Skotidakis began the process of acquiring a system that would allow it cool its dairy products more quickly. It contacted Geosaf Inc [Geosaf], a company from which it had bought packaging equipment in the past. Geosaf is Fromfroid's commercial agent in Canada. Through Geosaf, Fromfroid loaned a trial cell to Skotidakis for a period of about six weeks. Fromfroid then submitted a bid to Skotidakis for the construction of 24 cells of this system. However, after discussions with Geosaf, Skotidakis did not follow up on Fromfroid's offer.

[7] On October 26, 2018, approximately three months after the 753 patent expired, a representative of Geosaf attended Skotidakis's facilities in order to service equipment that is not relevant to these proceedings. There he discovered 24 cooling cells bearing a strong resemblance

to the cells sold by Fromfroid, which he photographed. The following photograph shows a general view of the device at issue in the present dispute:

[8] Skotidakis argues that these cells were built between August and October, 2018, after the 753 patent had expired. The defendant Frimasco Inc [Frimasco], a construction company specializing in coolers, carried out the work on behalf of Skotidakis.

[9] Believing that the cells in question could not have been built in the short amount of time following the expiry of the 753 patent, Fromfroid has instituted this patent infringement action.

II. Analysis

[10] The main issue raised by Fromfroid's action is that of the date on which the cells were built. If I find that these cells were built before the 753 patent expired, I must then determine whether they infringe this patent and, if so, what the appropriate relief is.

[11] For the following reasons, I am satisfied that the cells were built before July 2018, resulting in infringement of the 753 patent. I will award $149,270 in compensatory damages. Moreover, Skotidakis will be condemned to pay $200,000, and Frimasco, $50,000, in punitive damages.

[12] The action brought by Fromfroid is based on the *Patent Act*, RSC 1985, c P-4 [the Act]. Given that the facts mainly occurred in Ontario, it is to this province's law that we must turn if private law concepts are needed to complete the provisions of the *Patent Act*: *Interpretation Act*, RSC 1985, c I-21, s 8.1. However, since the trial took place in Quebec, Quebec civil law applies on a suppletive basis with respect to evidence: *Canada Evidence Act*, RSC 1985, c C-5, s 40.

A. *The Date of Construction of the Cells*

[13] As I mentioned above, the parties have joined issue mainly on the date of construction of the cells. This issue must be disposed of according to the civil standard of proof, namely, balance

of probabilities. In other words, I must determine whether it is more likely that the cells were built before or after the expiry date of the 753 patent. Certainty is not required for me to allow Fromfroid's action.

[14] I find that Fromfroid has proven, on a balance of probabilities, that Skotidakis and Frimasco built the cells before the 753 patent expired. The evidence adduced at trial establishes a serious, precise and concordant presumption to this effect.

[15] To explain my finding, I will first summarize the parties' versions of events. I will then analyze the circumstantial evidence that, by inference, tends to show that the cells were built before the patent expired. Lastly, I will look at the Defendants' testimonies and the supporting documentary evidence.

(1) Positions of the Parties

[16] Fromfroid has no direct evidence of the date on which the cells at issue were built. The main witnesses called by Fromfroid—its president, Mr. Thierry Paupardin, and the vice-president of Geosaf, Mr. Philippe Saouaf—have no personal knowledge of the events surrounding the construction of the cells. Fromfroid presented the expert evidence of an engineer, Mr. François Peynet, who stated that, on the one hand, the damage found on the cells in the October 26, 2018 photographs shows that they had been in use for some time and, on the other hand, that it would be very difficult to build cells of this kind within three months. Fromfroid also relies on the inferences that it draws from all the evidence submitted during the trial.

[17] The Defendants, for their part, state that the cells were built between August and October, 2018, and called several witnesses with direct knowledge of this fact. In 2015, shortly after having refused the offer from Fromfroid because the price was too high, Skotidakis allegedly asked Frimasco if it was possible to both design and build a rapid refrigeration system. However, although Frimasco took preliminary steps at this point, the project's implementation was delayed because the electrical power supply at Skotidakis's plant was insufficient, which would have prevented the cells from being used to their full potential. It was not until June 2018 that Hydro One began construction of a new transmission line intended to provide more power. It was therefore from this moment on that it became useful to build cooling cells. Furthermore, Skotidakis presented the expert evidence of Dominique St-Louis, an engineer, in order to rebut Mr. Peynet's opinion regarding the extent of the wear on the cells and how long it would take to complete the project. Lastly, the defendants stated that they were unaware that the 753 patent existed.

(2) Circumstantial Evidence and Presumptions of Fact

[18] The evidence on which Fromfroid's position relies is circumstantial. This means that Fromfroid did not call any witnesses with personal knowledge of the main fact at issue, namely, whether Skotidakis had Frimasco build the cells before the patent expired. Fromfroid relies, rather, on other facts that make it possible to establish, by way of deduction, that the main fact occurred.

[19] In the civil law, this mode of proof is called a presumption of fact: Catherine Piché, *La preuve civile*, 6th ed (Montréal: Éditions Yvon Blais, 2020), paragraphs 1000 to 1003. Articles 2846 and 2849 of the *Civil Code of Québec* apply in this respect:

2846. A presumption is an inference drawn by the law or the court from a known fact to an unknown fact.	**2846**. La présomption est une conséquence que la loi ou le tribunal tire d'un fait connu à un fait inconnu.
2849. Presumptions which are not established by law are left to the discretion of the court which shall take only serious, precise and concordant presumptions into consideration.	**2849**. Les présomptions qui ne sont pas établies par la loi sont laissées à l'appréciation du tribunal qui ne doit prendre en considération que celles qui sont graves, précises et concordantes.

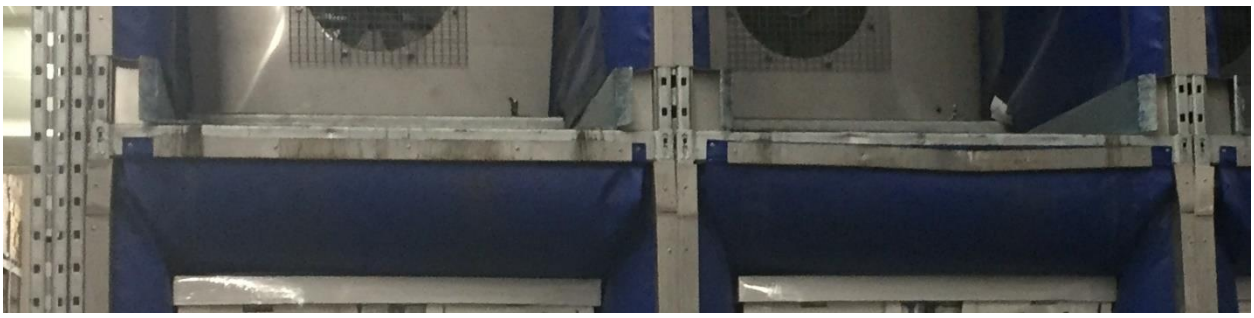
[20] By way of example, presumptions of fact have been relied upon to establish that a person willingly caused a fire in order to make a claim with the insurer: *Barrette v Union canadienne (L'), compagnie d'assurances*, 2013 QCCA 1687; presumptions of fact can also show that one person has exerted pressure on another to cause the latter to write a will in his favour: *Stoneham and Tewkesbury v Ouellet*, [1979] 2 SCR 172. Depending on the circumstances, presumptions of fact can carry more weight than testimony and can, for example, bring the court to find that a verbal agreement existed, even if one party denies having consented to it: *2968-7654 Québec inc v 3089-8001 Québec inc*, 2022 QCCA 91.

[21] Similar principles apply in the common law provinces and territories: *R v Villaroman*, 2016 SCC 33, [2016] 1 SCR 1000; Sidney N Lederman, Alan W Bryant and Michelle K Fuerst, *The Law of Evidence in Canada*, 6th ed, Markham, LexisNexis, 2022 at paragraphs 2.94 to 2.110.

[22] I will now set out the facts that, in my view, enable me to establish a serious, precise and concordant presumption that the cells were built prior to the expiry of the patent in July 2018.

a) *Wear on the Cells*

[23] The photographs taken by Geosaf on October 26, 2018, are the main physical evidence warranting the drawing of an inference with respect to the date of manufacture of the cells. In his testimony, Mr. Peynet explained why, in his view, the extent of wear on the cells showed that they could not have been built during the three months prior to when the photographs were taken. Mr. Peynet emphasized in particular two types of wear, which can be seen in the photograph below:



[24] Firstly, dirt markings can be seen on the cross-piece separating the two rows of cells, which Mr. Peynet attributes to repeated contact with the masts of the forklifts used to move the pallets of products. Secondly, one can see that the cross-piece above the right-hand cell (cell no. 2) is deformed; that suggests that it got caught on an object.

[25] Mr. St-Louis pointed out three elements in rebuttal of Mr. Peynet's position. Firstly, he noted that the cells were built on an existing racking that had been in use for 10 years, and that it

would not be surprising to find signs of degradation. He argued that the marks caused by the forklifts were on the original racking. However, this argument is belied by the facts. The cross-pieces, and more specifically the protective cappings placed over the tarpaulins, were not part of the original rackings. Rather, they were installed by Frimasco, as Mr. St-Louis himself illustrates it in the diagram at page 15 of his report and which he acknowledged during cross-examination.

[26] Secondly, given that these photographs were taken from a certain distance, Mr. St-Louis said that he was unable to determine whether the marks that he observed were caused by contact with the forklifts or by other factors, such as the oil finish of galvanized steel, manufacturing defects or marks caused during assembly. I am unable to follow Mr. St-Louis in this regard, and I accept, rather, Mr. Peynet's testimony. The marks found on the cross-pieces are not due to normal variations in the appearance of metal or to the assembly process, as a comparison between the condition of the cross-pieces (on the left) and the vertical uprights (on the right) demonstrates:

[27] If the marks found in the picture on the left were the result of natural variations or manufacturing defects, similar marks should have been found on the vertical uprights. However, that is not the case. While several of the vertical cross-pieces show reflections suggesting a lightly curved surface, the difference between the condition of the horizontal cross-pieces and that of the vertical uprights is striking. Moreover, all the horizontal crosspieces show similar marks—two narrow dark marks on the ends and two marks that are wider and less dark in the centre—which suggest that they have been hit regularly by the same type of equipment. Nothing similar can be seen on the vertical uprights. I am therefore of the view that Mr. Peynet's explanation is more credible: the wear found in these photographs was caused by frequent contact between the forklifts and the cells, which tends to show that the cells had been in use for much longer than a month when the photographs were taken.

[28] Thirdly, Mr. St-Louis pointed out that due to the gauge of the steel plate used, the deformation in the cross-piece above cell no 2 could have been caused by a single incident and could have taken place shortly after the cells were built. Indeed, that is possible. However, this does not prove that the cells were built after the patent expired, but only weakens the inference that could be drawn from the presence of this deformation if this was the only evidence to this effect.

[29] Although this was noted in Mr. St-Louis's report and not Mr. Peynet's, it is also apparent that the cross-piece over cell no 16 (on the right-hand side of the image below) is missing:

[30] In my view, the presence of considerable wear or anomalies on two horizontal cross-pieces barely one month after the alleged completion of Frimasco's work tends to show that the cells were built long before.

[31] Furthermore, Mr. St-Louis relied on several photographs taken by Skotidakis in 2021 and on the photographs that he himself took in 2022 to conclude that, in comparison, the cells were almost new when they were photographed in 2018. I give little weight to this opinion. It is true that more parts are damaged in the photographs from 2022 than in those from 2018, including some vertical uprights. However, it is difficult to infer, as does Mr. St-Louis, that more wear would have been found in 2018 if the cells had been built two years prior. In my view, the marks and damage found in the photographs from 2018 are not insignificant and it is rather unlikely that they occurred within a few weeks. Moreover, Mr. St-Louis admitted that he did not have the cells photographed for the purpose of assessing the extent of the wear they had suffered, and he asserted that he is not able to draw any conclusions on the basis of the 2018 photographs. I

hardly understand how he can then claim to be able to reach conclusive findings from a comparison of the two sets of photographs.

[32] In short, the apparent condition of the cells in the photographs taken on October 26, 2018 tends to show compellingly that they were built before the 753 patent expired and not after. Mr. Peynet's findings in that respect are not seriously undermined by Mr. St-Louis's testimony, whose main argument was that the degradation found was on the original rackings, although he had to admit during cross-examination that the main marked or damaged parts had been installed by Frimasco.

b) *The Purchase Date of the Fans*

[33] The only invoice that the defendants submitted for the cell components was for the fans.

[34] This invoice shows that Frimasco acquired these fans on January 11, 2016, over two years before Skotidakis allegedly accepted Frimasco's offer to undertake construction of the cells.

[35] Mr. Robert, the president of Frimasco at the time, stated that there was nothing unusual about this and that he often purchases materials before being awarded a contract if he is quite hopeful that he will get it. By way of example, he stated that he had paid $100,000 for aluminum in anticipation of a contract that he had not yet obtained because the price of aluminum had started to rise. In the present case, Mr. Robert's certainty was apparently based on the general trend within the agri-food industry toward acquiring rapid cooling cells.

[36] Such an explanation is entirely implausible. It is hard to imagine that a small business like Frimasco would spend close to $40,000 to acquire fans without any guarantee that the project would materialize. This is particularly true given that Frimasco had never carried out any other project with fans and it would have been difficult, therefore, to find another use for them. What is more, Mr. Robert did not mention any reason, such as a price increase or a shortage, that would have rendered the purchase of the fans urgent.

[37] Moreover, Mr. Skotidakis stated that he was not aware that Frimasco had purchased the fans and Mr. Robert said that he had not spoken with him about it. This makes the situation even more implausible. Given that Skotidakis and Frimasco have a close and longstanding business relationship, it seems to me that Mr. Robert would have informed Mr. Skotidakis prior to purchasing the fans in order to confirm that the latter still intended to carry out the project.

[38] One detail renders Frimasco's version even more implausible. The invoice filed in evidence concerns the purchase of 46 fans, while building 24 cells requires 48 fans. Two were missing. In cross-examination, Mr. Robert explained that he initially acquired two fans, in order to [TRANSLATION] "get to know" this piece of equipment and determine how they might be attached to the cell he planned to build. However, he said that he did not carry out extensive testing with these fans, apart from connecting them to ensure that they were working. Nor did he find an invoice for these two fans. This is not a credible explanation. Written information regarding the shape and dimensions of the fans is no doubt available, particularly as Mr. Robert stated that it is a standard component. And if it was necessary to have the item in hand, a single fan would have sufficed. The purchase of the two fans is much more compatible with the

explanation suggested by Fromfroid, that Frimasco acquired two fans in order to make a cell prototype and, given that the cell yielded the expected results, Frimasco then ordered 46 fans to build 23 additional cells.

[39] I am therefore satisfied that the purchase of the fans in January 2016 strongly suggests that the work was carried out shortly thereafter and not in the summer of 2018, as the Defendants allege.

c) *The Control Program Metadata*

[40] The cooling cells are controlled by computer. During the examination on discovery of Skotidakis's representative, counsel for Fromfroid asked for evidence as to the date on which the control program was installed using RS Logix 500 software. In reply, Skotidakis provided a screenshot of a Windows Explorer window showing that the control program file had been last modified on October 29, 2018. Counsel for Skotidakis stated that it was impossible to provide a screenshot showing the date of installation or creation. At trial, Raphaël Karagiassotis, who implemented the program, presented the screenshot showing only the date of last modification.

[41] However, the information that would make it possible for me to infer the date on which the cells were built is not the date on which the file containing the control program was last modified, but rather the date on which it was created. Any Windows user should know that the date on which a file was created can be viewed by right-clicking on the file to call up the file properties. Mr. Karagiassotis admitted this during cross-examination. Indeed, an employee of

Fromfroid, Mr. Mikaël Bourgois, explained this in his testimony and added that it was also possible to verify the date on which the program was created using the RS Logix 500 software.

[42] The court can draw a negative inference from the fact that a party has chosen not to submit evidence in their possession, and may find that this evidence would have been detrimental to that party: see, for example, *Promutuel Assurance Boréale v McKnight*, 2022 QCCA 1735 at paragraph 69. In the present case, Skotidakis could have submitted evidence of the date on which the control program was created, but failed to do so. Mr. Karagiassotis did not explain why it would not be possible to provide this evidence, and acknowledged that it would have been very easy to display the properties of the control program file. I infer from this that the date on which the program was created was prior to the expiry of the patent.

[43] Indeed, I do not understand why Mr. Karagiassotis, who has advanced skills in computer science, would provide irrelevant information to this Court when he knows full well how to display the relevant information. As I explain below, his credibility is affected by this ploy.

d) *The Extent of the Project's Planning by August 2018 and the Construction Timeframe*

[44] Fromfroid attempted to show, in particular through Mr. Peynet's testimony, that it was unlikely that Frimasco could have managed to build 24 cooling cells within a timeframe of approximately three months. In contrast, in his report, Mr. St-Louis stated that three months was enough time to carry out a project that is not particularly complex. During the trial, Mr. Peynet

acknowledged that it would be possible to complete the project within this timeframe provided that the main components had already been sourced and the design completed.

[45] However, during the trial, Mr. Robert stated that when he made his bid on August 9, 2018, he did not yet know the precise design of the cells. In particular, he had not yet decided if he would use semi-rigid deflectors or tarpaulins to direct the air toward the interior of the pallet. This is, however, a crucial element of the system's design.

[46] It is very difficult to believe that Frimasco's work could have been completed between August 16 and September 21, 2018, just over five weeks, if the design had not yet been decided upon one week before starting.

[47] It is also hard to believe that Frimasco built the cells at full speed without knowing if the design worked. Mr. Robert did not explain when and how the design of the cells was validated. No one testified that a prototype was built and tested during the five weeks that Frimasco's work was ongoing. Moreover, it is difficult to see how a prototype could have been tested without being connected to a power supply. However, GS Electric only began its work on September 7, while Frimasco completed its work on September 21.

[48] It is therefore implausible that Frimasco could have completed the work in the conditions and within the timeframes described by Mr. Robert. This evidence therefore constitutes an indication that tends to show that the cells were built before the patent expired.

(3) The Defendants' Evidence

[49] The Defendants argue that the circumstantial evidence I have just analyzed cannot discredit the testimony of four persons who state that, to their personal knowledge, the cells were built between August and October of 2018, particularly since this testimony is supported by documentary evidence. Accepting Fromfroid's position would entail that these four witnesses lied to this Court and that the documents they submitted are forgeries.

[50] However, I give little weight to this evidence. The four witnesses in question did not provide very credible testimony. The documents filed in evidence are surprising in several respects and cast additional doubt on the Defendants' version of events. Lastly, the issues related to the electrical power supply of the factory do not adequately explain why Skotidakis would have waited until the summer of 2018 to order the cells. I will address these issues in turn.

a) *The Credibility of the Defendants' Witnesses*

(i) Kosta Skotidakis

[51] Mr. Skotidakis is one of the officers and shareholders of the Defendant Skotidakis or its parent company. As a shareholder, he obviously has an interest in the outcome of this case.

[52] During cross-examination, Mr. Skotidakis was very defensive. Often, when a topic that could be detrimental to him was brought up, he was not able to remember or refused to respond. For example, he had no difficulty saying whether specific pieces had been installed by Frimasco

or had existed previously, but when counsel for Fromfroid pointed out the horizontal cross-piece on which Mr. Peynet based his opinion, he said he did not know about it. He also stated that he did not know the answer to simple questions, such as his official title within the company, the approximate number of milk deliveries in a day or how many amperes each fan used. This attitude shows that, rather than shedding full light on the situation, he sought to avoid any challenge to his version of events. This has an impact on his credibility.

(ii) Raphaël Karagiassotis

[53] Mr. Karagiassotis is Skotidakis's production manager and he works closely with Mr. Skotidakis. His testimony mainly focused on the discussions with Fromfroid and Geosaf in 2014. His involvement in the construction of the cells at issue was apparently limited to the design of the control program. As I explained earlier, his testimony on this matter deliberately evaded the actual relevant question, that being the date on which the program was created (and not the date on which it was last modified). I would seriously question how much credibility can be accorded to a witness who engages in such a ploy.

(iii) Gilles Robert

[54] Mr. Robert was CEO of Frimasco in 2018. He recently retired. Frimasco is a family business that his father founded and that he and his brother inherited. Although the evidence does not specifically reveal who is a shareholder of Frimasco at present, it is obvious that Mr. Robert is an interested witness.

[55] Several aspects of Mr. Robert's testimony are implausible. I have already explained why I do not believe that Frimasco acquired fans in 2016 without knowing whether the project was going ahead.

[56] During examination on discovery and in his evidence in chief at trial, Mr. Robert did not deem it necessary to explain that he first acquired two fans in order to carry out trials. It was only during cross-examination that he addressed that issue. He does not know whether an invoice for these two fans exists. The explanations he has provided to justify the purchase of these two fans seem implausible. It is more likely that these explanations only aim to conceal the existence of a prototype.

[57] Lastly, as I will explain below, Mr. Robert provided an implausible explanation in an attempt to demonstrate that the cells built by Frimasco do not infringe the patent. His explanation directly contradicts the photographs in the record and he made no effort to submit any evidence in support of his assertion. Making implausible assertions of this nature in the hope that the court will believe them has a serious impact on the witness' credibility.

(iv) Stéphane Boudrias

[58] Mr. Boudrias is co-owner of GS Electric, the company that carried out the electrical work on the cells in question. Skotidakis very often retains the services of GS Electric. Although GS Electric is not a Defendant in this matter, the longstanding business relationship that it enjoys with Skotidakis could have resulted in pressure being exerted, either explicitly or implicitly, on Mr. Boudrias.

[59] Furthermore, Mr. Boudrias was hesitant when giving testimony and was not very precise, in particular with respect to certificates issued by the Electrical Safety Authority [ESA]. During cross-examination, he confused the two certificates and adjusted his testimony after counsel for Skotidakis intervened. He was initially hesitant to state that the cell control panel was covered by one of these certificates, then said that he was almost one hundred percent sure.

b) *The Documentary Evidence*

[60] The Defendants also highlight the documentary evidence, which allegedly shows that the cells were built between August and October, 2018. That evidence includes Frimasco's bid, work orders and invoice; the cheque that Skotidakis issued to Frimasco as payment for this invoice; the invoices from GS Electric for wiring the cells; the ESA certificates allegedly pertaining to the cells; and a CSA certification label affixed to the inside of the cell control panel.

[61] Although these documents show no obvious signs of falsification, there is also no basis for excluding the possibility that they are forged, that the date on them could have been altered (e.g., by replacing "2016" with "2018") or that they refer to a different project. For example, the ESA certificates are particularly vague with respect to the equipment covered and I am far from convinced that they pertain to the electrical installation of the cells. Similarly, even if the cheque made out to Frimasco is authentic, it could possibly be in connection with one of the many other projects that this company has carried out for Skotidakis. I would also note that the CSA label was disclosed late, and Skotidakis provided no convincing explanation. Moreover, Frimasco was not able to find the computer files containing the bid or the invoice or confirm the date on which they were created. Nor was Frimasco able to provide the emails that transmitted these

documents, alleging that they were most likely hand-delivered. Once again, the metadata is missing.

[62] In any event, when documents are filed by witnesses whose credibility is already tarnished, the court may give little weight to these documents.

[63] What is more, the documentation provided is extremely sparse, even assuming that retaining detailed archives is not a priority for family businesses like Skotidakis and Frimasco. There are no invoices for materials, apart from those for the fans. Nonetheless, Fromfroid sent its demand letter to Skotidakis less than three months after Frimasco's work came to an end and one could have thought that Frimasco would retain proof of its expenditures. Both the bid and the invoice are extremely brief in their descriptions of the work. This is all the more surprising as the bid was merely an estimate. One would expect the invoice to make it possible to grasp the nature of the work performed and the justification for the discrepancy of approximately $8,000 between the bid price and the amount invoiced. In that respect, it is possible to compare this invoice to those from GS Electric, which provide details about the materials and the number of hours worked. Furthermore, Frimasco provided only two preliminary drawings for the cells, dating from 2015. It is hard to believe that no other drawing was produced for a project of this size. It is also difficult to understand the need for preliminary drawings if it was not necessary to prepare more detailed ones later. In these circumstances, the documentation provided casts additional doubt on the version of events put forward by the Defendants, rather than corroborating it.

[64] Counsel for Frimasco deftly suggested that if the Defendants had wanted to submit falsified evidence, they would have done a better job and, in particular, would not have provided an invoice for the fans dating from 2016. The rather unprofessional or sketchy nature of the documentary evidence is said to be evidence of candour rather than a sign of deception. While this argument is tempting, I cannot accept it. It amounts to speculating on what a good forger would do to avoid detection. I would also point out that in order to produce more forged documents, more people would have to be involved. For example, it would have been risky to falsify the invoice for the fans without involving a representative of the vendor, as the latter could be called to testify. I am therefore of the view that the poor quality of several of the documents that were submitted does not render them more credible.

c) *The Insufficient Electrical Power Supply and the Coincidence of the Dates*

[65] Skotidakis emphasized the issue of the electrical power supply in support of its position that the cells had not been built until 2018, after the 753 patent expired. It would have been necessary to wait until the electrical capacity increased, without which the cells could not be used at their full potential. However, it was not until summer of 2018 that Hydro One carried out the work of constructing a new transmission line, allowing more electricity to be delivered to the Skotidakis factory. It was precisely at that moment that Skotidakis allegedly ordered the cells from Frimasco.

[66] As tempting as this explanation may be, it suffers from a number of weaknesses and does not exclude the opposite scenario, which is that the cells were built prior to the patent’s expiry.

[67] Firstly, the cells could operate with the existing power supply. Although the new transmission line was connected only at the end of November 2018, the photographs taken in October 2018 show that eight cells were operating simultaneously. Indeed, Mr. St-Louis acknowledged that the approximately 40 amperes required for the 24 cells to operate account for only a small proportion of the factory's total supply and that it was likely possible to free up enough power to operate the cells. The claim advanced by Mr. St-Louis, however, is that the cells would not have been profitable if the production capacity was not increased at every step of the process, which would have been impossible without additional electricity. Although this explanation is logical in theory, it is not supported by any concrete evidence with respect to the Skotidakis factory. It is entirely possible that the cooling of products was a bottleneck that would have justified special investment and using the small amount of available electricity for this purpose. Given Mr. St-Louis's ambiguous conclusions and the lack of concrete evidence regarding production capacity, I am not satisfied that it was necessary to wait for the factory's electrical upgrade to build the cooling cells.

[68] Secondly, the explanation put forward now is inconsistent with Skotidakis's conduct, given that it took the initiative, starting in 2014, to solicit offers to have the cooling cells built despite the fact that the factory's power supply was already insufficient. Why start this process if there was not enough electricity to operate the cells? Why ask Geosaf for the cost of 32 cells if it was not possible for 24 cells to operate? During closing arguments, counsel for Skotidakis submitted that it was always understood that the order would not go ahead until Hydro One had increased the factory's electrical supply. However, none of the witnesses said anything to that effect. Nor do communications between the parties from that time show that the electrical power

supply was an issue, much less a *sine qua non* condition of the contract being awarded. When Mr. Karagiassotis communicated with Mr. Saouaf for the last time, he referred to the excessive cost as a reason for not moving forward, without ever mentioning the issue of the electrical power supply.

[69] In short, even though I do not doubt that the factory's supply of electrical power was insufficient until 2018, this situation was never an obstacle to building the cooling cells. It therefore does not make it more likely that the cells were built after the expiry of the patent. It is rather an excuse found after the fact.

[70] In reality, the question of the electrical power supply does not explain the coincidence between the expiry of the 753 patent, on July 30, 2018, and the submission of Frimasco's bid 10 days later on August 9, 2018. That coincidence is all the more remarkable considering that both Skotidakis and Frimasco claim they had no knowledge of existence of the 753 patent, much less its expiry date. Although it is no doubt impossible to draw any firm conclusions from this single coincidence, it is one more element suggesting that the cells were built prior to the expiry of the patent.

(4) Summary

[71] Let us recall the evidence suggesting that the cells at issue were built before the 753 patent expired on July 30, 2018: the wear on the cells when they were photographed in October 2018; the purchase of the fans in January 2016; the negative inference drawn from the lack of evidence of the creation date of the control program; the implausible timeframe for

completion if the design had not been decided upon by mid-August, 2018; and the coincidence between the expiry of the patent and the start of the construction work. Each of these elements strongly suggest that the cells were built before 2018. A series of implausible events would have to be accepted in order to find that these elements were consistent with construction taking place between August and October, 2018. Taken together, these elements establish a serious, precise and concordant presumption that the cells were built before the 753 patent expired.

[72] In view of that presumption, the testimony presented by the Defendants carries little weight. These witnesses had little credibility and the documentation on which they relied was problematic in several respects.

[73] I therefore find that Skotidakis and Frimasco built the cooling cells at issue before the expiry of the 753 patent. The analysis must therefore move to the next step, whether these cells infringe the patent.

B. *Infringement*

[74] With one exception, there is no serious dispute regarding the issue of infringement. In response to a request to admit, Skotidakis and Frimasco acknowledged a number of facts that establish infringement. Skotidakis has presented no evidence in relation to this issue. Frimasco maintains that the cells do not infringe the 753 patent because the tarpaulins form a funnel. The only evidence it has presented in this regard is the testimony of Mr. Robert.

[75] In his expert report, Mr. Peynet concludes that the cells Frimasco constructed for Skotidakis infringe claims 1, 2 and 3 of the 753 patent. His opinion is based on the Defendants' admissions and the photographs taken in 2018 and 2021. Mr. St-Louis was not instructed to comment on this issue. Frimasco did not provide expert evidence.

[76] Moreover, no issue has been raised as to the interpretation of the claims or the identification of the skilled person. I accept Mr. Peynet's conclusions in this regard.

[77] Given the above, there is no need for a detailed analysis of the issue of infringement. I need only explain why I reject Mr. Robert's claims about the tarpaulins forming a funnel. I will then briefly show that the cells infringe the patent claims. Lastly, I will explain why there is no need to deal with the issue of induced infringement.

(1) Tarpaulins Forming a Funnel

[78] Mr. Robert stated that the tarpaulins in the cells built by Frimasco do not press against the sides of the pallet, but rather form a funnel. In other words, the tarpaulin comes into contact with the pallet only at the back, meaning that a certain amount of air can escape through the sides of the pallet. The cells built by Frimasco would therefore differ from an essential element of the invention covered by the 753 patent, namely that it is not air pressure that presses the tarpaulins against the products. However, this is clearly contrary to what appears in the photographs of the cells built by Frimasco, especially on the following part of a photograph taken on October 26, 2018:

[79] It is obvious that the side tarpaulins completely cover the sides of the pallets and do not form a funnel. The various photographs filed in evidence also show the difference between cells in operation, where the inflated tarpaulins surround the pallet of products, and cells not in operation, where the tarpaulins hang loosely. This is especially obvious in two photographs taken by Skotidakis in 2021 that show the same cell in operation (left) and not in operation (right):

[80] The photograph on the right shows the tarpaulins not touching the pallet, especially on the left side, whereas the photograph on the left shows the tarpaulins pressing against the pallet.

[81] In his expert report, Mr. Peynet explains the difference between tarpaulins that form a funnel and tarpaulins that press against the products. He concludes without any doubt that the tarpaulins of the cells built by Frimasco do not form a funnel but rather press against the products. He reiterated this assertion at trial. I have no reason to doubt his opinion.

[82] I also note that the Defendants admitted that [TRANSLATION] "[e]ach tarpaulin is arranged so as to prevent air leaks around the products". I fail to see how this statement can be squared with the assertion that the tarpaulins do not press against the products.

[83] Mr. Robert provided no concrete evidence to support his claims that the tarpaulins form a funnel and do not press against the pallets. He made no attempt to explain what can be seen in the photographs I have just analyzed. However, if the tarpaulins did in fact form a funnel, it would have been easy to demonstrate. I conclude that the "funnel theory" is entirely devoid of merit.

(2) Claims of 753 Patent

[84] Having disposed of the "funnel theory", I can now turn to the issue of the infringement of each claim of the 753 patent. In this regard, it must be ascertained whether the cells constructed by Frimasco feature each essential element of each claim: *Free World Trust v Électro Santé Inc*, 2000 SCC 66, [2000] 2 SCR 1024 at paragraphs 31, 55 and 70.

[85] As mentioned above, the Defendants admitted that the cells constructed by Frimasco featured a number of essential elements of the claims of the 753 patent. When they denied a

request to admit, everything suggests that it was in order to promote the "funnel theory", which I have rejected.

[86] In his report, Mr. Peynet thoroughly analyzes each essential element of the three claims. He was not cross-examined on his analysis, and no contrary evidence was provided. I accept his conclusions in their entirety and will merely summarize them here.

[87] Claim 1 of the patent reads as follows:

> [TRANSLATION]
>
> 1. Airtight seal apparatus for a temperature adjustment system for products placed on a pallet in an air circulation tunnel, this apparatus being characterized as follows: to prevent any air leaks around the products on the pallet in the tunnel (5), a tarpaulin (1) is arranged to press against the sides and top of the products under the pressure of the circulating air, forming a seal.

[88] The Defendants' admissions cover all the essential elements of this claim except for air pressure causing the tarpaulin to press against the sides and top of the products. The fact that it is air pressure that does this is the very reason that I have rejected the "funnel theory". I therefore agree with Mr. Peynet that the cells constructed by Frimasco infringe Claim 1.

[89] Claim 2 reads as follows:

> [TRANSLATION]
>
> 2. An apparatus as described in Claim 1, characterized as follows: multiple tarpaulins (1), each tarpaulin (1) being arranged in the gap (E) between one surface (4A) of the stack (4) of products on the pallet and the facing surface (5A) of the tunnel, so as to close the gap (E) when inflated under the pressure of air blown into the

> tunnel, forcing the air to flow through the spaces between the products.

[90] Frimasco's cells clearly have a number of tarpaulins arranged as described in this claim, and these tarpaulins inflate under the pressure of air, [TRANSLATION] "close the gap" and [TRANSLATION] "force the air to flow through the spaces between the products". In this respect, I agree with Mr. Peynet that the latter expressions have the same meaning as the Defendants' admission that [TRANSLATION] "[e]ach tarpaulin is arranged so as to prevent air leaks around the products".

[91] Claim 3 reads as follows:

> [TRANSLATION]
>
> 3. An apparatus as described in Claim 2, characterized as follows:
>
> – Each tarpaulin (1) has two edges (1A, 1B), one (1A) at the upstream end and the other (1B) at the downstream end of the tunnel with respect to the direction of air flow through the products stacked on the pallet.
>
> – The width of the tarpaulin (1) is greater than the distance between the edges (1A, 1B), so as to form a flexible pocket.
>
> – The downstream edge (1B) of the tarpaulin is attached at least indirectly to the surface (5A) of the tunnel (5) that it covers.
>
> – The upstream edge (1A) of the tarpaulin (1) is kept away from the surface (5A) of the tunnel (5) that it covers, so that air can be blown into the space between the tarpaulin and the tunnel surface, pressing the tarpaulin (1) against the stack of products on the pallet (4).

[92] Basically, this claim is about how the tarpaulins are attached. Frimasco and Skotidakis admit most of the elements of this claim. Some requests to admit were denied either because the

Defendants insisted that a tarpaulin has four sides, which does not affect a claim that focuses on two of those sides, or because they appear to misunderstand the meaning of [TRANSLATION] "upstream" and [TRANSLATION] "downstream," which, in the present context, respectively mean back and front. In particular, the Defendants admit that [TRANSLATION] "[t]he upstream edge of the tarpaulin is kept away from the surface of the tunnel" and that [TRANSLATION] "[a]ir can be blown through the gap between the upstream edge and the tarpaulin into the space between the tarpaulin and the tunnel surface".

[93] As for the rest, Mr. Peynet's analysis of the photographs of the cells persuasively demonstrates that the cells feature all the essential elements of Claim 3. The Defendants deny that [TRANSLATION] "air … blown into the space … press[es] the tarpaulin (1) against the stack of products on the pallet", stating that [TRANSLATION] "even before air is blown, the tarpaulins are already pressing against the products"; however, this is merely a reformulation of the "funnel theory", which I rejected above.

(3) Induced Infringement

[94] Fromfroid submits that Frimasco built and Skotidakis used the invention covered by the 753 patent before the patent expired. Moreover, should the Court conclude that the cells were used only after the expiry of the patent, Fromfroid further submits that Skotidakis induced Frimasco to infringe the invention.

[95] There is no need to address this issue. I find that Fromfroid has demonstrated, on a balance of probabilities, that the cells were built *and* used before the patent expired. Under

section 42 of the Act, the patent holder has the exclusive right of constructing and using an invention. Although the exact date cannot be determined from the evidence, the cells were most likely built in the months after the fans were purchased, that is, in 2016.

C. *Compensatory Damages*

[96] I must now determine the compensatory damages that the Defendants must pay Fromfroid for infringing the 753 patent. The purpose of these damages is to compensate Fromfroid, that is, to put Fromfroid in the position it would have been in had the Defendants not infringed the patent.

[97] The first part of the analysis is to consider what Skotidakis would have done had it not ordered infringing cells from Frimasco. I find that the evidence shows that Skotidakis would have purchased Fromfroid's system. It was Skotidakis that initiated discussions with Geosaf, thereby expressing its interest in obtaining a cooling system. Mr. Robert said that the [TRANSLATION] "industry trend" was to acquire such a system. The evidence does not show that there were any lawful alternatives to the Fromfroid system. Therefore, Skotidakis would have purchased this system. This means that Skotidakis's conduct deprived Fromfroid of a sale.

[98] In principle, the measure of damages is the profit that Fromfroid would have made by completing the sale.

[99] Fromfroid submits that this profit should not be assessed on the basis of the actual selling price but rather on the basis of a higher "standard" price that does not include the discount that

Fromfroid had offered Skotidakis in order to gain access to the Canadian market. However, the evidence does not show that the price actually offered to Skotidakis included such a discount. The profit margin that Fromfroid expected to make on the cells sold to Skotidakis is very similar to the margin expected for other projects. Accountant Andrew Michelin concluded that the price actually offered was within the "standard" price range. Therefore, whether the price should be "normalized" is a moot point, and Fromfroid's loss of profit should be calculated on the basis of the price actually offered to Skotidakis.

[100] The evidence shows that Fromfroid lowered its price twice. The price of the last offer should be used because a sale would probably have been made at that price. In addition, Fromfroid agreed that Skotidakis would handle the assembly and electrical wiring of the cells. These items must therefore be deducted from the sale price and estimated cost of labour in calculating the profit that Fromfroid would have made.

[101] In response to Skotidakis's hesitation, Fromfroid and Geosaf considered offering to carry out a two-step sale, that is, Fromfroid would sell the cells to Geosaf, and Geosaf would sell them to Fromfroid. Messrs. Paupardin and Saouaf exchanged emails stating that they had reached an agreement on the price of the first part of the sale. However, the evidence as a whole suggests that no such offer was ever made to Skotidakis. Mr. Karagiassotis did not mention this in his testimony. Mr. Saouaf's email to Mr. Paupardin on February 12, 2015 (Exhibit 70 at 208), shows that the last discount given to Skotidakis was what the parties referred to as the "Russian discount", which suggests that the transaction involving Geosaf was never offered to Skotidakis.

Therefore, this two-step sale should not be taken into account in calculating Fromfroid's profit. The last offer is therefore the one dated February 5, 2015 (Exhibit 12).

[102] The price of this offer is €235,300. From this amount, the estimated costs must be deducted, except for the €120,123 related to assembly and cabling. The gross profit is €115,177. From the gross profit, Geosaf's 10% commission must be deducted. The net profit is therefore €103,660. Using the current exchange rate of CAD 1.44 to EUR 1, this is equivalent to $149,270.

D. *Punitive Damages*

[103] In *Whiten v Pilot Insurance Co*, 2002 SCC 18, [2002] 1 SCR 595 at paragraph 94 [*Whiten*], the Supreme Court of Canada stated that punitive damages are imposed only "if there has been high-handed, malicious, arbitrary or highly reprehensible misconduct that departs to a marked degree from ordinary standards of decent behaviour" and that "punitive damages should be assessed in an amount reasonably proportionate to such factors as the harm caused, the degree of the misconduct, the relative vulnerability of the plaintiff and any advantage or profit gained by the defendant".

[104] The situations of Skotidakis and Frimasco must be analyzed separately.

[105] Skotidakis knowingly infringed Fromfroid's patent. It could not have been unaware of the existence of this patent, which Fromfroid had repeatedly highlighted in its written communications. However, "[a]llegations of willful and knowing infringement are alone insufficient to support a claim to punitive damages": *Bauer Hockey Corp v Sport Maska Inc*

(Reebok-CCM Hockey), 2014 FCA 158 at paragraph 25. As mentioned above, the suppletive law in this case is that of Ontario, which means that the reasoning in *Cinar Corporation v Robinson*, 2013 SCC 73, [2013] 3 SCR 1168 at paragraphs 113–114, cannot be applied.

[106] However, I find that there are aggravating circumstances that warrant punitive damages. In particular, Skotidakis sought to conceal the infringement by presenting various pieces of evidence intended to mislead the Court as to the date the cells were made. That is highly reprehensible misconduct: *Chanel S de RL v Lam Chan Kee Company Ltd*, 2016 FC 987 at paragraph 76, aff'd *Lam v Chanel S de RL*, 2017 FCA 38 at paragraph 11.

[107] In this case, a number of factors suggest that a substantial amount should be awarded. Taking into account the factors set out in *Whiten* at paragraphs 112 and 113, I conclude that the conduct of Skotidakis was highly reprehensible. This conduct was clearly deliberate and motivated by the desire to obtain patented technology at low cost. It lasted over three years, from the initial dealings with Frimasco until the patent expired. Above all, Skotidakis sought to conceal its conduct and mislead this Court.

[108] Moreover, Skotidakis is a large company, with annual sales of approximately $200 million. Although caution should be exercised in considering the Defendant's financial means, these may be relevant when assessing the amount necessary to achieve deterrence: *Whiten* at paragraph 119. For this reason, awards against individual Defendants in other cases are not an appropriate basis for comparison. In fact, if a Defendant is only ordered to pay a sum equivalent to the profits or savings resulting from the infringement, this could be seen as an

incentive to run the risk of being caught. From what I can infer from the evidence, the amount of compensatory damages is of the same order of magnitude as the savings Skotidakis made by ordering the cells from Frimasco rather than Fromfroid. An additional amount is therefore needed to deter anyone who might be tempted to engage in similar conduct.

[109] Regardless of the above, the attempt to mislead this Court is serious and should be severely denounced.

[110] For comparison, Fromfroid cites *Airbus Helicopters SAS v Bell Helicopter Textron Canada Limitée*, 2019 FCA 29, in which $1 million was awarded in punitive damages. In my view, however, that case can be distinguished, in particular because the Defendant's conduct was more reprehensible than that of Skotidakis and because Fromfroid has not shown that Skotidakis's conduct adversely affected its business.

[111] Taking all of these factors into account, I order Skotidakis to pay $200,000 in punitive damages.

[112] I will now consider Frimasco's situation. The evidence does not show that Frimasco was aware of the patent. Mr. Robert stated that he did not know about Fromfroid until these proceedings were instituted. Fromfroid is nevertheless claiming punitive damages in order to denounce Frimasco's participation in concealing the infringement.

[113] I believe that Frimasco's involvement in the cover-up is just as reprehensible as that of Skotidakis. Given that this is the only allegation against Frimasco and that Frimasco does not appear to have benefited from this involvement, I believe that $50,000 in punitive damages is sufficient, given the size of the company.

III. Motion to Reopen Trial

[114] More than a month after I took the case under advisement, Fromfroid brought a motion to reopen the trial. It alleges that it obtained a copy of a certificate of compliance directly from the ESA that differs from the one that Skotidakis provided during discoveries and that was shown to Mr. Boudrias during his cross-examination. Skotidakis opposed the motion.

[115] In *671122 Ontario Ltd v Sagaz Industries Canada Inc*, 2001 SCC 59, [2001] 2 SCR 983 at paragraphs 59–65, the Supreme Court of Canada stated that moderation and caution were required before exercising the discretion to reopen the trial. It also reiterated the two-part test applicable to such motions, which requires that it be shown that the new evidence would likely change the outcome of the trial and that it could not have been obtained before the trial.

[116] Given my decision on the merits, it is clear that admitting Fromfroid's new evidence would have no effect on the outcome of the trial. In this regard, I would point out that I had reached the conclusions set forth in paragraphs 13 to 73 of this judgment before Fromfroid brought its motion. This is sufficient for me to conclude that the motion should be dismissed.

IV. Conclusion

[117] For the reasons above, Skotidakis and Frimasco are jointly and severally ordered to pay Fromfroid $149,270 in compensatory damages. In addition, Skotidakis is ordered to pay Fromfroid $200,000 in punitive damages and Frimasco is ordered to pay Fromfroid $50,000 in punitive damages.

[118] Sections 36 and 37 of the *Federal Courts Act*, RSC 1985, c F-7, govern pre- and postjudgment interest. The rules differ depending on whether the cause of action arose in a single province. In this case, the cause of action is the construction and use of the invention by Skotidakis and Frimasco. Although the parties did not make submissions in this regard, the evidence shows that this cause of action essentially arose in Ontario. I will therefore apply the law of that province, namely the *Courts of Justice Act*, RSO 1990, c C.43.

[119] Prejudgment interest is calculated at "the bank rate at the end of the first day of the last month of the quarter preceding the quarter in which the proceeding was commenced" (s 127(1)). When the action was commenced, in January 2019, the rate was 2.0%. Prejudgment interest is calculated from "the date the cause of action arose" (s 128(1)). As I indicated at paragraph [95], I find that the cells were built in 2016 and have been in use since then. I will therefore award prejudgment interest from January 1, 2017. However, prejudgment interest applies only to compensatory damages. Under paragraph 128(4)(a) of the *Courts of Justice Act*, no prejudgment interest may be awarded on punitive damages.

[120] Postjudgment interest is “the bank rate at the end of the first day of the last month of the quarter preceding the quarter in which the date of the order falls … plus 1 per cent”. This rate is currently 6%.

[121] In addition, the parties have asked me to defer the presentation of submissions regarding costs. I grant this request.

JUDGMENT in T-127-19

THIS COURT'S JUDGMENT is as follows:

1. The action is allowed.
2. The Defendants are jointly and severally ordered to pay the Plaintiff $149,270 plus interest at the annual rate of 2% from January 1, 2017, to the date of this judgment, and 6% from the date of this judgment onward.
3. The Defendant 1048547 Ontario Inc is ordered to pay the Plaintiff $200,000 plus interest at the annual rate of 6% from the date of this judgment.
4. The Defendant Frimasco Inc is ordered to pay the Plaintiff $50,000 plus interest at the annual rate of 6% from the date of this judgment.
5. The Plaintiff will serve and file its submissions regarding costs, which may not exceed 10 pages, no later than 30 days after the date of this judgment.
6. The Defendants will serve and file their submissions regarding costs, which may not exceed 10 pages, no later than 15 days after the plaintiff's submissions have been served.
7. The Plaintiff's motion to reopen the trial is dismissed.

"Sébastien Grammond"
Judge

FEDERAL COURT

SOLICITORS OF RECORD

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