Commissioner's Decision #1408 Décision du Commissaire #1408

TOPIC: J-50 (Mere Plan) SUJET: J-50 (Simple Plan)

> Application No.: 2,163,768 Demande n°.: 2,163,768

# IN THE CANADIAN PATENT OFFICE

# DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,163,768 having been rejected under subsection 30(3) of the *Patent Rules*, has subsequently been reviewed in accordance with paragraph 30(6)(c) of the *Patent Rules*. The recommendation of the Board and the decision of the Commissioner is to refuse the application.

Agent for the Applicant:

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## INTRODUCTION

[1] This recommendation concerns a review of the rejected patent application number 2,163,768, which is entitled "METHODS AND APPARATUS RELATING TO THE FORMULATION AND TRADING OF RISK MANAGEMENT CONTRACTS" and is owned by Alice Corporation Pty Ltd. The application stands rejected for failing to define statutory subject-matter. A review of the rejected application has therefore been conducted by the Patent Appeal Board pursuant to paragraph 30(6)(c) of the Patent Rules. For the reasons set out below, our recommendation is that the application be refused pursuant to s. 40 of the Patent Act.

# BACKGROUND

## The application

- [2] As stated in the introductory paragraph of the specification, the application "relates to methods and apparatus, including electrical computers and data processing systems applied to financial matters and risk management. In particular, the invention is concerned with the management of risk relating to specified, yet unknown, future events."
- [3] The specification then provides an explanation of the nature of various types of risk.See, for example, page 1, lines 21 to 32:

Risk can take many forms in view of the large range and type of future events which might result in adverse consequences. Risk can be categorised, in one instance, as 'economic' in nature. Phenomena that constitute economic risk include: commodity prices, currency exchange rates, interest rates, property prices, share prices, inflation rates, company performance, and market event based indices.

Another characterisation of risk concerns 'technical' phenomena. This can include things like the breakdown of an electricity generation plant, aircraft engine failure, and the damage to, or failure of, orbiting telecommunications satellites. The outcomes for each of these phenomena will be adverse for the users and/or supplier.

[4] The specification then describes the prior art about the various economic arrangements that entities have employed to manage risk, explaining that it was known for individuals and enterprises to hedge against adverse outcomes by means such as self-insurance, futures contracts, forwards contracts, and swaps (see page 2, line 17 to page 3, line 11). However, there are disadvantages with these prior art arrangements, including that they are "relatively expensive, and provide limited phenomenon coverage, and therefore cannot meet the requirements of the party seeking to hedge against such wide-ranging future risk...As a consequence, entities find themselves saddled with obligations they have little control over and cannot escape." (See page 3, lines 12 to 22)

[5] Against this background understanding, the specification then provides the following explanation of the invention (see page 4, lines 20 to page 5, line 7):

In this sense, the invention is directed to something having economic value to individuals, enterprises and societies as a whole. Methods and apparatus that provide for the management of risk offer material advantages by, for example, minimising adverse future outcomes, providing both a form of compensation in the event of future adverse future outcomes, and forms of risk management not otherwise supported or available in the prior art, and thus have value in the field of economic endeavour.

## DISCLOSURE OF THE INVENTION

The invention encompasses methods and apparatus enabling the management of risk relating to specified, yet unknown, future events by enabling entities (parties) to reduce their exposure to specified risks by constructing compensatory claim contract orders on yet-to-be-identified counter-parties, being contingent on the occurrence of the specified future events. The entities submit such orders to a 'system' which seeks to price and match the most appropriate counter-party, whereupon matched contracts are appropriately processed through to their maturity.

Therefore, the invention enables parties to manage perceived risk in respect of known, yet non-predictable, possible future events. These future events may relate to measurable phenomena whose outcome is verifiable, and cannot be materially influenced by any other entity having a stake in that outcome.

#### **Prosecution history**

[6] Patent application 2,163,768 was filed in Canada on May 28, 1993 and published on December 8, 1994. Examination culminated with the issuance of a Final Action (the "FA") on December 6, 2013 in which the Examiner determined that all of claims 1 to 38 were directed to subject-matter that lies outside the definition of "invention" and therefore do not comply with section 2 of the *Patent Act*. The FA also raised a double-patent defect that, as explained below, is no longer in issue and also took the view that the specification is insufficient, as per subsection 27(3) of the *Patent Act*.

- [7] Accordingly, the Examiner rejected the application, pursuant to subsection 30(3) of the *Patent Rules* and requisitioned the Applicant pursuant to subsection 30(4) to either amend the application or provide arguments as to why the application complies with the *Patent Act* and the *Patent Rules*.
- [8] By letter dated June 4, 2014, the Applicant provided its response to the Final Action (the "R-FA"). The Applicant did not seek to amend the application, but rather provided submissions as to why the application complied with the *Patent Act* and *Patent Rules* and therefore sought reconsideration by the Examiner.
- [9] In particular, the Applicant argued that the claims defined a machine, which was therefore patentable under section 2 of the *Patent Act*. Finally, the Applicant concluded its R-FA arguing that the specification complied with subsection 27(3) of the *Patent Act*.
- [10] The Examiner reviewed the R-FA but was not persuaded to withdraw any of the defects in the FA and therefore wrote a Summary of Reasons (SOR), dated July 24, 2014, to explain why the subject-matter defect identified in the FA was maintained. The Examiner was also not persuaded to withdraw the insufficiency objection pursuant to subsection 27(3) of the *Act*. Accordingly, the Examiner forwarded the file to the Patent Appeal Board (the "Board").
- [11] In a letter dated September 12, 2014, (the "Acknowledgement Letter") the Board forwarded the Applicant a copy of the SOR and offered the Applicant an opportunity to make further written submissions and/or attend an oral hearing. In particular, the Acknowledgment Letter requested that by December 15, 2014, the Applicant advise the Board which of the following three options it wished to pursue:
  - proceed with an oral hearing (with or without providing written submissions in response to the SOR);
  - proceed without an oral hearing, in which case the review would proceed based on the written record (which could include written submissions from the Applicant in response to the SOR); or

- withdraw the application, if the Applicant did not want the panel to proceed with a review and for the Commissioner to not issue a Decision.
- [12] The Acknowledgement Letter further advised that if the Applicant did not respond, "the review will proceed based on the written record as it presently stands and – unless the panel identifies additional defects in accordance with subsection 30(6.1) of the *Patent Rules* – a Commissioner's Decision will issue without further communication".
- [13] No response to the Acknowledgment Letter was received by the Board.
- [14] A panel of the Board (the "Panel") was established to review the application.
  However, noting that the 20-year period from the filing of the application elapsed on May 28, 2013, a further letter was sent on February 15, 2016 (the "Status Update Letter") to the Applicant seeking to confirm the Applicant's continued interest in the matter or alternatively whether the Applicant wished to withdraw its application. The letter went on to request a response by March 2, 2016.
- [15] No response was received by the Panel. As such, on March 14, 2016, a voice-mail message was left with the agent for the Applicant, seeking confirmation of receipt of the September 12, 2014 and February 15, 2016 letters from the Panel.
- [16] As no response was received, one further letter was sent by registered mail to the Applicant's agent, advising in relevant part, that:

As we have not heard from you further, this will confirm that, as indicated in the letter of September 12, 2014, a review of the application will proceed based on the written record as it presently stands and a Commissioner's Decision will issue without further communication.

[17] As there has been no communication from the Applicant, we will proceed to review the rejected application based on the written record as it presently stands, in accordance with the above-noted correspondence.

# **I**SSUES

[18] Based on our reading of the FA, the SOR and the Applicant's R-FA, the main substantive issue raised is whether the claims of the present application are within the definition of invention under section 2 of the *Patent Act*. We also briefly address the status of the application, in view of the expiry of twenty years since its filing.

## **LEGISLATION AND LEGAL PRINCIPLES**

#### **<u>Purposive construction</u>**

[19] In accordance with *Free World Trust v Électro Santé Inc*, 2000 SCC 66 [*Free World Trust*] essential elements are identified through a purposive construction of the claims done by considering the whole of the disclosure, including the specification and drawings. (see also *Whirlpool Corp v Camco Inc*, 2000 SCC 67 at paras 49(f) and (g) and 52.) In accordance with the *Manual of Patent Office Practice*, §13.05 [revised June 2015], the first step of purposive claim construction is to identify the person skilled in the art and their relevant common general knowledge ("CGK"). The next step is to identify the problem addressed by the inventors and the solution put forth in the application. Essential elements can then be identified as those required to achieve the disclosed solution as claimed.

#### **Statutory subject-matter**

[20] The definition of invention is set out in section 2 of the *Patent Act*:

"invention" means any new and useful art, process, machine, manufacture or composition of matter, or any new and useful improvement in any art, process, machine, manufacture or composition of matter.

[21] The Office examination memo (PN 2013-03) entitled "Examination Practice Respecting Computer-Implemented Inventions" clarifies examination practice with respect to the Office's approach to computer implemented inventions. [22] As stated in PN 2013-03, Office practice considers that "where a computer is found to be an essential element of a construed claim, the claimed subject-matter will generally be statutory...Where, on the other hand, it is determined that the essential elements of a construed claim are limited to matter excluded from the definition of invention...the claim is not compliant with section 2 of the *Patent Act*, and consequently, not patentable." Further, PN 2013-03 provides examples of matter excluded from the definition of "invention", including "fine arts…methods of medical treatment…inventions that lack physicality…[or] inventions where the claimed subject-matter is a mere idea, scheme, plan or set of rules".

## ANALYSIS

#### Application of Subsection 30(6) of the Patent Rules

[23] Although it has been more than 20 years since the application was filed, this review was conducted pursuant to s. 30(6)(c) of the *Patent Rules*. The Applicant responded within the six month deadline set out in the Final Action, paid the last maintenance fee required under the *Rules* on May 9, 2012, and did not withdraw the application in response to our correspondence. The application has not been deemed abandoned pursuant to paragraphs 73(1)(a) or 73(1)(c) of the *Patent Act*.

#### **<u>Claim Construction</u>**

[24] For ease of reference, claim 1 reads as follows:

1. A data processing system to enable the formulation of multi party risk management contracts, the system comprising: at least one stakeholder input means by which ordering stakeholders can input contract data representing at least one offered contract in at least one predetermined phenomenon, each said phenomenon having a range of future outcomes, and said contract data specifying a future time of maturity, entitlements due at maturity for the range of outcomes, and a consideration due to a counter-party stakeholder; at least one counter-party stakeholder input means by which at least one counter-party stakeholder input means by which at least one counter-party stakeholder input means by which at least one counter-party stakeholder input means by which at least one counter-party stakeholder input means by which at least one counter-party stakeholder input means by which at least one counter-party stakeholder input means by which at least one counter-party stakeholder input means by which at least one counter-party stakeholder input means by which at least one counter-party stakeholder input means by which at least one counter-party stakeholder input means at least one counter-party stakeholder input means in said predetermined range of outcomes in the future for one or more of said predetermined phenomena; a data storage means linked with each said stakeholder input means and linked with each said counter-party stakeholder input means to store said contract data and said registering data; and data processing means, linked with the data storage means, for pricing

and matching contracts from said contract data and said registering data, said pricing including selecting the registering data corresponding to the time of maturity for each predetermined phenomenon, and calculating a counter-consideration derived from said entitlements, and said matching including comparing said consideration and said counter-consideration to match an offered contract with at least one of said counter-party stakeholders according to predefined criteria.

[25] The remaining seven independent claims relate to either a "system to enable the formulation of multi-party risk management contracts" (claims 15 and 35) or methods to be used in relation to the formulation of multi-party risk management contracts (claims 17, 31, 36, 37, 38).

#### The Panel Agrees with the Construction Set Out in the FA

- [26] Having reviewed the record in this case, including the specification and the correspondence arising from prosecution, we are in agreement with the conclusion reached by the Examiner that the essential elements of the claims are the steps needed for the scheme of formulating multi-party risk management contracts.
- [27] In particular, the first step of purposive claim construction is to identify the person skilled in the art and their relevant common general knowledge ("CGK"). The next step is to identify the problem addressed by the inventors and the solution put forth in the application. Essential elements can then be identified as those required to achieve the disclosed solution as claimed.
- [28] To this end, the Examiner's claim construction began with a consideration of the description, as follows:

According to the description, in the prior art, individuals and enterprises have hedged against their risk through the use of quality assurance practices, warranties, increased research and development activity, etc. (see page 2, lines 17 to 23), or by making individual risk management contracts (see page 2, line 24 to page 3, line 11). The present claimed invention attempts to overcome the disadvantages of the prior art; namely that prior art economic risk management mechanisms are expensive, and provide limited phenomenon coverage, especially for "less tangible" forms of risk (see pages 1 to 4) by enabling the formulation of risk management contracts between multiple parties.

More specifically, the invention "encompasses methods and apparatus enabling the management of risk relating to specified, yet unknown, future events by enabling entities (parties) to reduce their exposure to specified risks by constructing compensatory claim contract orders on yet-to-be-identified counter-parties, being contingent on the occurrence

of the specified future events" (see page 4, lines 30 to 35). Any entity may submit an "order" to the system which prices and matches contracts to the most appropriate counterparty. The contracts are contingent on the occurrence of specified future events; the events may be any measurable phenomena whose outcome is verifiable and cannot be materially influenced by any other entity having a stake in that outcome (see page 4, line 30 to page 5, line 7). For example, an owner of an ice cream stand (whose sales increase in hot weather) wishing to minimize his risk in relation to the weather may be matched with a coffee company (whose sales decline in hot weather) for the creation of a risk management contract.

# [29] Having so considered the specification, the Examiner took the view that the computer elements of the claims provide the operating context but are not essential

elements:

As purposively construed, the computer (data processing system having input means, data storage means and processing means) is not considered to be an essential element for solving the problem of enabling the management of risk relating to specified, yet unknown, future events (see present description, page 1, lines 5 to 9). Although some claims are directed to a system, this merely provides context for the solution to the problem.

[30] Instead, the Examiner took the view that the essential elements are the various steps involved in the scheme of formulating multi-party contracts. For example:

The essential element of the claims required to solve the problem is considered to be the scheme of formulating multi party risk management contracts. Having regard to independent claims 1, 17 and 31, this includes:

- input data from an ordering stakeholder including contract data representing at least one offered contract in at least one predetermined phenomenon, each said phenomenon having a range of future outcomes, and said contract data specifying a future time of maturity, entitlements due at maturity for the range of outcomes, and a consideration due to a counter-party stakeholder;

input data from at least one counter-party stakeholder consisting of registering data as to a respective view of the outcomes in said predetermined range of outcomes in the future for one or more of said predetermined phenomena;
calculations for pricing and matching contracts from the input data, said pricing including selecting the registering data corresponding to the time of maturity for each predetermined phenomenon and calculating a counter-consideration derived from said entitlements; said matching including comparing said consideration and said counter-consideration to match an offered contract with at least one of said counter-party stakeholders according to predefined criteria.

[31] More generally, the Examiner found that the essential elements of each of the independent claims consist of those steps needed for the scheme of formulating multi-party risk management contracts with the computer aspects providing the operating context. Moreover, the dependent claims were considered to "set out further limitations regarding the registered data, the contract matching and payment

of the entitlement, and are considered to share the same essential elements as described above."

[32] Finally, the Examiner concluded with an explanation as to why, in the Examiner's view, the Applicant's previous representations were not considered persuasive:

The latest correspondence asserts that the computer elements are essential as "each of the claim elements of the data processing system are directly recited within the body of the claim and tied directly to the transformation of the input data from each of the input means to formulate the multi-party risk management contract by the data processing means", and because the "data processing system…contains physical apparatus components such as an input means, a data storage, and a data processing means that is linked to the data storage means to formulate the contract (e.g. price and match a contract) according to defined criteria (e.g. contact data and registering data related to at least one counterparty stakeholder)".

Although these computerized features are material to the operating environment of the conventional ordering system, these features are not essential to the solution of enabling the formulation of multi-party risk management contracts...Any advantages to utilizing a computer to perform the claimed method flow from the known capabilities of computers in performing calculations, and do not point to the computer implementation being an essential feature.

The claims on file do not comply with section 2 of the *Patent Act* as the essential elements are directed to a mere scheme and not to a patentable category of invention under section 2 of the *Patent Act*. [Citations omitted]

- [33] We acknowledge that the Examiner does not explicitly state in the FA who the person skilled in the art is or their common general knowledge. Further, the Examiner does not explicitly state the problem to be solved as a separate step in the analysis. However, reading the FA as a whole, including the above-referenced passages, the Examiner appears to us to have had proper regard to the various inquiries that PN 2013-02 (now MOPOP §13.05) direct and the Examiner's responses are well supported by the specification as a whole, including those specific portions cited in the FA.
- [34] For example, the Examiner's views on the problem to be solved are implicit from statements in the FA such as: "The presently claimed invention attempts to overcome the disadvantages of the prior art; namely that prior art economic risk management mechanisms are expensive, and provide limited phenomenon coverage, especially for 'less tangible' forms of risk (see pages 1 to 4) by enabling the formulation of risk

management contracts between multiple parties" and that the computer is not essential to solving the "problem of enabling the management of risk relating to specified, yet unknown, future events". In this regard, we agree that the problem set out in the specification is that of enabling the management of risk relating to specified, yet unknown, future events and the disclosed solution is "the scheme of formulating multi-party risk management contracts."

[35] Moreover, we also agree that, on this basis, the elements in the claims that define the computer (i.e. data processing system having input means, data storage means and processing means) do no more than define the "operating environment of the conventional ordering system" and that these elements "are not essential to the solution of enabling the formulation of multi-party risk management contracts". Instead, we agree with the Examiner that the essential elements of the claims are the steps needed for the scheme of formulating multi-party risk management contracts.

#### Arguments in the R-FA Are Not Persuasive

- [36] Further, we have considered the arguments made in the R-FA, but nonetheless agree with the above claim construction.
- [37] In particular, the R-FA begins with a critique of the method employed by the Examiner in assessing whether the claims were directed to patentable subject-matter, arguing that this approach is contrary to the result reached by the Federal Court in *Amazon.com, Inc. v. Canada (Attorney General)*, 2010 FC 1011 and the principles derived from *Free World Trust* on how the claims of a patent are to be construed. The Applicant then provided its view as to why the Examiner's construction is a misapplication of *Free World Trust* and further why claim elements that define the computer are essential. As the Applicant has not provided further submissions on the patentability of its application since this R-FA, it is helpful to quote from this portion of the R-FA in some length:

Purposive construction is not a *carte blanche* for the Patentee to exclude limitations that appear in the claim to support a finding of infringement, or for a potential infringer to import certain limitations into the claim for the purpose of avoiding infringement, or indeed for the Patent Examiner to decide that certain elements can be ignored as inessential elements to determine eligibility as to patentability. The analysis required to determine essentiality is a rigorous one, following the steps set forth in Free World, and is equally rigorous regardless of the purpose of determining the essentiality.

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The Examiner, in the Office Action, has suggested that the application of purposive construction to this claim results in a computer being considered not to be an essential element.

The Examiner has not applied the principles set forth in Free World to determine the essentiality of features recited in the claim, but rather has parsed the claim in to two sets of elements, one of which is deemed to be "inessential". This is an approach that is not based on any jurisprudence of the Canadian Courts, and is in fact precisely the type of analysis rejected by the Federal Court in Amazon.com.

Following the direction in Free World, a POSITA is to determine whether a variant of a particular element would make a difference in the way in which the invention works <u>or</u> whether the intent of the inventor expressed or inferred from the <u>claims</u> that a particular element is essential irrespective of the practical effect.

The POSITA is believed to be a systems engineer, familiar with the operation of large computer systems used in the financial services industry.

From that perspective, the variation of the claimed invention to exclude the inputs, data storage, and data processing means and their interaction, would clearly make a difference in the way the invention works. For example, without data storage, the data supplied at the inputs could not be used as contemplated. There would be a difference in the manner in which the invention operates. Those features must therefore be considered essential features of the claim.

Similarly, applying the second test, there is nothing in the claim to indicate that those elements are not essential.

The claim recites not only the presence of the specific elements, thereby indicating a *prima fascia* [**sic**] essentiality, but also the interoperability of those elements to obtain the desired result. Clearly those elements are required for that result to be achieved, and therefore there is no indication of the intent of the inventor to consider such elements inessential.

Applying the principles of Free World therefore, the elements of the data processing system recited in claim 1 are essential elements and are to be considered when determining the eligibility of claim 1 for protection under section 2 of the *Patent Act*.

. . .

Every indication is that the computer and the elements recited in the claim are each essential elements that must be considered when determining the scope of the claim. The preferred embodiments are described in the context of computer operations. There is no alternative described.

To adopt the procedure performed by the Examiner in simply ignoring the recitation in claim 1 of the computer is to revert to the analysis that was rejected by the Federal Court in the Amazon.com decision. The approach taken by the Examiner simply introduces uncertainty in to the scope of protection accorded by the claims since it would appear that certain elements of the claim may be arbitrarily deemed inessential without any support or justification for finding such inessentiality. A proper determination shows that claim 1, as purposefully construed, includes as essential elements the components of the data processing system.

- [38] We note that although the FA was clearly based on PN 2013-02 and PN 2013-03, which were the Patent Office's response to the Federal Court of Appeal's reasoning in *Canada (Attorney General)* v. *Amazon.com Inc.*, 2011 FCA 328 [*Amazon.com FCA*], the Applicant relies exclusively on the Federal Court's decision in *Amazon.com, Inc. v. Canada (Attorney General)*, 2010 FC 1011 [*Amazon.com FC*] to critique the methods of claims construction employed by the Examiner. Such reliance is problematic because the *Amazon.com FCA* differs in significant respects from *Amazon.com FC*.
- [39] In particular, the construction of the claims in *Amazon.com FC* and the finding that they constituted patentable subject-matter were not affirmed by the Federal Court of Appeal. The Federal Court of Appeal granted the Attorney General's appeal, setting aside the Federal Court's Judgment and replaced it with a Judgment that allowed Amazon's appeal of the Commissioner's decision along with a direction for the Commissioner "to re-examine the application in accordance with the Federal Court of Appeal's Reasons". The Federal Court of Appeal was critical in important respects of the Federal Court decision. Of particular note, the Federal Court of Appeal did not accept the Federal Court's suggestion "that a business method that is not itself patentable subject matter because it is an abstract idea becomes patentable subject matter merely because it has a practical embodiment or a practical application". Further, the Federal Court of Appeal disapproved of the suggestion in the Federal Court decision that a "physicality requirement" could be met merely by the fact that the claimed invention has a practical application. (see *Amazon.com FCA* at paras. 59 to 69)

[40] Moreover, the Federal Court of Appeal recognized the possibility (which was not recognized in *Amazon.com FC*) that merely including a computer in a claim may not be sufficient to give the claim patentable subject-matter, writing:

[67] However, I do not necessarily accept the remainder of paragraph 53 of Justice Phelan's reasons, which reads as follows:

However, it is important to remain focused on the requirement for practical application rather than merely the physicality of the invention. The language in *Lawson* must not be interpreted to restrict the patentability of practical applications which might, in light of today's technology, consist of a slightly less conventional "change in character" or effect that through a machine such as a computer.

[68] If these statements are meant to suggest that our understanding of the nature of the "physicality requirement" as described in paragraph 66 above may change because of advances in knowledge, then I would agree. Nothing in the jurisprudence excludes such a possibility.

[69] However, if it is meant to suggest that this "physicality requirement" can be met merely by the fact that the claimed invention has a practical application, then I do not agree. The issue, in my view, is similar to the issue raised in the context of the patentability of business methods in that it requires consideration of *Schlumberger*. The claims in *Schlumberger* were not saved by the fact that they contemplated the use of a physical tool, a computer, to give the novel mathematical formula a practical application. As explained above, the claims in issue in this case may or may not be distinguishable from the claims in *Schlumberger*, depending upon how they are construed. [Emphasis Added]

[41] Finally, it is clear that the Federal Court of Appeal did not agree with the Federal Court's claim construction, finding it an "essentially literal construction", and rather than the appellate court perform its own construction, it was appropriate to return the application to the Commissioner for further determination:

[71] As I understand Justice Phelan's construction of claims 1 and 44, he adopted what is essentially a literal construction, based on his conclusion that the requirement of physical existence or manifestation of a discernible effect or change implicit in the statutory definition of "invention" was met because the use of a computer is an essential element of the claim.

[72] In my respectful view, it was not appropriate for Justice Phelan to undertake his own purposive construction of the patent claims on the basis of the available record in this case...

[73] Anyone who undertakes a purposive construction of a patent must do so on the basis of a foundation of knowledge about the relevant art, and in particular about the state of the relevant art at the relevant time. For the Commissioner, that assistance comes in the form of submissions from the patent applicant and, I assume, from staff at the patent office with the appropriate experience. Courts, however, generally require the expert evidence of persons skilled in the art (*Whirlpool* at paragraph 49).

[74] On those rare occasions when a court is required to construe a patent claim without expert assistance, the result necessarily is limited to a literal interpretation of the claims, which may not be well informed. In this case, Justice Phelan did not have the benefit of expert evidence about how computers work and the manner in which computers are used to put an abstract idea to use... I am unable to discern from the record what the Commissioner would have concluded about the patentability of the claims in issue based on the correct principles.

- [42] Accordingly, the Applicant's reliance on *Amazon.com FC* to criticize the Examiner's use of Patent Office practice -- developed in response to the *Amazon.com FCA* decision -- is not persuasive. Although both the Federal Court and the Federal Court of Appeal rejected the Commissioner's previous "form and substance" approach to claim construction, we are bound by *Amazon.com FCA* (and not *Amazon.com FC*) that provides the governing law in this area. Indeed, the differences between the two decisions were significant enough that following the Federal Court of Appeal decision, the Patent Office revoked the Practice Notice it had adopted following the Federal Court decision (i.e. PN 2011-04) and replaced it with PN 2013-02 (which has since been incorporated into MOPOP §13.05).
- [43] A further difficulty with the R-FA is that the claim construction proposed by the Applicant (and said to be supported by *Amazon.com FC*) appears to be premised on the notion that merely reciting computer elements in a claim is sufficient to confer patentable subject-matter. This appears to be the sort of "essentially literal construction" adopted by the Federal Court but rejected by the Federal Court of Appeal and inconsistent with the approach set out in PN 2013-02 and MOPOP §13.05.
- [44] For example, in the R-FA, the Applicant argues that "every indication is that the computer and the elements recited in the claim are each essential elements that must be considered when determining the scope of the claim". However, as noted at paragraph 34, the Examiner pointed to a number of instances in the specification that support the notion that the specification is not directed to the solution of any problem regarding the operation of a computer, but rather that the envisioned computer is a conventional computer that provides the operating environment for enabling the formulation of multi-party risk management contracts. Such statements made by the inventors in the

specification provide at least *some* indication that the computer elements are not essential to the invention.

- [45] Indeed, the only reference the Applicant makes to the disclosure portion of the specification in support of its proposed claim construction is to the first lines, which, under the heading of "Technical Field", state: "This invention relates to methods and apparatus, including electrical computers and data processing systems applied to financial risk management." However, the next sentence in this section states: "In particular, the invention is concerned with the management of risk relating to specified, yet unknown, future events."
- [46] Importantly, the Applicant has failed to point out any statements in the specification that indicate that the invention relates to the solution of a problem related to using a computer to enable the formation of the risk management contracts of the present application or provide an explanation as to why those aspects of the specification that underlie the Examiner's construction were somehow misunderstood or improperly relied upon by the Examiner.
- [47] We also observe that whereas the disclosure makes reference to computer systems, such references point to conventional or known computers without any teaching that they need to be modified (either physically or through specific programming instructions) in any way so as to enable the management of risk and contract formation to which the patent is directed. Typical of such references is page 11, lines 22 to 30, which provides:

In the embodiment described, the processing unit 20 comprises three inter-linked data processors 93, 97, 104, such as the Sun 670MP manufactured by Sun Microsystems, Inc. of the USA. Each processing unit 93, 97, 104 runs operational system software, such as Sun Microsystems OS 4.1.2, as well as applications software. The applications software is, in part, written around the flow diagrams subsequently described in Figs. 8 to 16, and Figs. 18 to 40, and access, or otherwise creates, the data files as summarised in Appendix H.

Such a passage, when read in the context of the specification as a whole, reinforces, in our view, the position set out by the Examiner that the computer is nothing more than the operating environment in which the contract formation takes place.

- [48] More generally, we are of the view that a review of the specification as a whole, including those portions cited by the Examiner in the FA and SOR, results in a more informed understanding of the claims and one that supports the view that the computer elements are not essential to the present claims.
- [49] We also add that we do not agree with the statements in the R-FA that the Examiner "revert[ed] to the analysis that was rejected by the Federal Court in the Amazon.com decision" or that the approach taken permits the Examiner to arbitrarily deem elements "inessential without any support or justification." Rather, according to the written record, the FA was based on the practice adopted by the Office in response to the *Amazon.com FCA* decision and in applying this practice to the facts of the case, the Examiner has provided ample support and justification for the conclusions reached.
- [50] Finally, we also agree with how the Examiner responded to the R-FA in the SOR:

This argument has been maintained from the final action. The latest correspondence argues (pages 2 to 5) that the claims are improperly construed, however, the application has been examined according to the latest practice guidance.

The latest correspondence also argues (pages 6 to 7) that the computer is an essential element of the claims as "variation of the claimed invention to exclude the inputs, data storage, and data processing means and their interaction, would clearly make a difference in the way that the invention works", there is nothing in the claim to indicate that the computer is not essential, and that the description specifies that the invention is related to methods and <u>apparatus</u>.

Although these computerized features are material to the operating environment of the conventional ordering system, these features are not essential to the solution of enabling the formation of multi-party risk management contracts. Instead, these features define the specific working environment for the invention. Any advantages to utilizing a computer to perform the claimed method flow from the known capabilities of computers in performing calculations, and do not point to the computer implementation being an essential feature.

[51] As explained above, the Applicant has not provided any response to the SOR, which was provided to the Applicant with the Acknowledgment Letter.

Conclusion on Claim Construction

- [52] Accordingly, the Panel is of the view that the R-FA proposes a construction that is the sort of "essentially literal construction" adopted by the Federal Court but rejected by the Federal Court of Appeal and inconsistent with the approach set out in PN 2013-02 (now MOPOP §13.05). For these reasons, we do not find that the R-FA provides any persuasive argument as to why either the construction approach utilized in the FA or the actual construction reached by the Examiner ought to be varied.
- [53] As we are in agreement with the conclusion reached by the Examiner and have not been persuaded otherwise by the R-FA, we conclude that the essential elements of the claims are the steps needed for the scheme of formulating multi-party risk management contracts.

#### Subject-Matter

- [54] In the FA, the Examiner applied PN 2012-03 and concluded that since the essential elements to the claims are the steps needed for the scheme of formulating multi-party risk management contracts, the claims are directed to a mere scheme and therefore do not relate to patentable subject-matter within the definition of invention under section 2 of the *Patent Act*. The Applicant did not make any submissions in the R-FA to the effect that if the Examiner's construction were adopted, then a mere scheme constitutes patentable subject-matter.
- [55] Having regard to section 2 of the *Patent Act* and PN 2013-03, we agree with the Examiner that the essential elements of the claims do not relate to patentable subjectmatter.
- [56] As noted above, the definition of invention is set out in section 2 of the *Patent Act*: "invention" means any new and useful art, process, machine, manufacture or composition of matter, or any new and useful improvement in any art, process, machine, manufacture or composition of matter.

Further, as explained above at paragraph 22, PN 2013-03 was released by the Office following the *Amazon.com FCA* decision and takes the view that where it is

determined that the essential elements of a construed claim are limited to matter excluded from the definition of invention, including where the subject-matter is a mere idea, scheme, rule or set of rules, the claim will not be compliant with section 2 of the *Patent Act*.

- [57] In the present case, the essential elements of the claims relate to the steps needed for formulating multi-party risk management contracts. These steps include elements such as the data inputs from the ordering and counter-party stakeholders to a transaction and calculation for pricing and matching contracts and do not define subject-matter that contains "something with physical existence, or something that manifests a discernible effect or change" (see *Amazon.com FCA* at para. 66). Rather, these essential elements define abstract and disembodied rules and can be considered equivalent to mental steps.
- [58] As noted above, the computer elements in the claims form part of the context or working environment but are not part of the solution to the problem. As such, the inclusion of such physical features in the claims cannot change the nature of the subject-matter of the claims if, after having performed a purposive construction, these physical features are found to be otherwise non-essential.
- [59] Therefore, the subject-matter of claims 1 to 38 pertains to an abstract scheme or set of rules that lies outside the definition of invention under section 2 of the *Patent Act*.

## **Double-Patenting**

[60] A further objection raised in the FA was that the subject-matter of claims 32, 33 and 34 of the application was not patentably distinct from the subject-matter of the claims on file of Canadian Patent Application No. 2,203,279 as they read on the date of the FA. Accordingly, the Examiner was of the view that claims 32 to 34 could not be granted in a separate patent and therefore must be removed. [61] Although the Applicant made brief submissions on this issue in the R-FA, we do not need to deal with this objection further for two reasons. First, Canadian Patent Application No. 2,203,279 went irrevocably abandoned on December 9, 2014. Therefore, the basis for the Examiner's double-patenting objection no longer exists. Second, as noted above, we are of the view that claims 32 to 34 do not relate to patentable subject-matter and therefore cannot be granted, regardless of any double-patenting issue.

## **Sufficiency**

- [62] The last objection raised in the FA was that the description and drawings do not describe the claimed subject-matter sufficiently to permit a person skilled in the art to make and work the subject-matter, such that the application fails to comply with subsection 27(3) of the *Patent Act*. In the R-FA, the Applicant disagreed, taking the view that the specification, for example the system architecture and flow charts in the drawings, "is replete with directions to the POSITA to implement the subject matter as claimed."
- [63] As we are of the view that the subject-matter of claims 1 to 38 does not relate to patentable subject-matter and therefore cannot be granted, it is not necessary for us to determine whether the specification complies with the requirements of subsection 27(3) of the *Act*.

# **RECOMMENDATION OF THE BOARD**

[64] In view of the above, the Panel recommends that the application be refused on the basis that claims 1 to 38 do not define statutory subject-matter and therefore do not comply with section 2 of the *Patent Act*.

T. Nessim Abu-Zahra Member Tara Derickx Member Andrew Strong Member

# DECISION

- [65] I concur with the conclusions and recommendation of the Board that the application be refused on the grounds that claims 1 to 38 do not define statutory subject-matter and therefore do not comply with section 2 of the *Patent Act*.
- [66] Therefore, in accordance with section 40 of the *Patent Act*, I refuse to grant a patent on this application. Under section 41 of the *Patent Act*, the Applicant has six months within which to appeal my decision to the Federal Court of Canada.

Johanne Bélisle

Commissioner of Patents Dated at Gatineau, Quebec, this 3<sup>rd</sup> day of August, 2016