

Commissioner's Decision #1439
Décision de la Commissaire #1439

TOPIC: J50 (Mere Plan)

SUJET: J50 (Simple Plan)

Application No.: 2,829,411

Demande n°.: 2 829 411

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,829,411, 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 Patent Appeal Board and the decision of the Commissioner are to refuse the application.

Agent for the Applicant:

BORDEN LADNER GERVAIS LLP
Scotia Plaza
40 King Street West
TORONTO Ontario
M5H 3Y4

INTRODUCTION

[1] This recommendation concerns the review of rejected patent application number 2,829,411, which is entitled “Financial products based on a serialized index” and is owned by International Exchange Holdings, Inc. The outstanding defect to be addressed is whether the claims on file lack statutory subject-matter. A review of the rejected application has been conducted by the Patent Appeal Board pursuant to paragraph 30(6)(c) of the *Patent Rules*. As explained in more detail below, our recommendation is that the application be refused.

BACKGROUND

The application

[2] Patent application 2,829,411 was filed in Canada on October 8, 2013 and published on March 4, 2014.

[3] The application relates to methods and systems for trading a new type of financial instrument that tracks a market index and is configured to retain each version of the index as the index undergoes changes.

Prosecution history

[4] On June 9, 2015, a Final Action (“FA”) was written pursuant to subsection 30(4) of the *Patent Rules*. The FA explained that the claims on file are directed to subject-matter that lies outside the definition of an invention as defined in section 2 of the *Patent Act*.

[5] In a response to the FA (“R-FA”) dated December 9, 2015, the Applicant submitted an amended claim set (the “proposed claims”) that, according to the Applicant, “overcome the Examiner’s objections and more accurately define the subject-matter of the present application”. The Applicant also provided arguments as to why the

subject-matter of the application is directed to statutory subject-matter under section 2 of the *Patent Act*.

- [6] As the Examiner was not persuaded by the Applicant's arguments and proposed claim amendments, the application was forwarded to the Patent Appeal Board ("the Board") for review, along with a Summary of Reasons ("SOR") maintaining the defect identified in the FA for the claims on file. The SOR also concluded that the arguments found in the FA equally apply to the proposed claims and thus, the defect identified in the FA was not overcome by the proposed amendments.
- [7] In a letter dated February 11, 2016, 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. On April 11, 2016, the Applicant expressed the wish to participate in an oral hearing via a videoconference. In the same letter, the Applicant provided a response to the SOR ("R-SOR") and further detailed arguments as to why the patent application complies with the *Patent Act* and *Patent Rules*.
- [8] The present Panel was formed to review the application under paragraph 30(6)(c) of the *Patent Rules* and make a recommendation to the Commissioner as to its disposition. In a letter dated June 9, 2017 (the "Panel Letter"), we set out our preliminary analysis and rationale as to why, based on the record before us, the claims on file do not define statutory subject-matter, and thus do not comply with section 2 of the *Patent Act*. With respect to the proposed claims, we stated that our preliminary view with regard to the non-statutory nature of the subject-matter of the claims on file would not have changed if the proposed claims had been adopted. The Panel Letter also invited the Applicant to provide further written submissions in response to the Panel's preliminary review.
- [9] On July 24, 2017 the Applicant replied to the Panel Letter (the "Reply") and provided written submissions with respect to the Panel's views and the Office

approach to purposive construction. In the same letter, the Applicant also submitted an additional proposed claim 42.

[10] An oral hearing (the “Hearing”) was held via videoconference on August 1, 2017. During the Hearing, the Applicant provided arguments in addition to those presented in the Reply.

ISSUE

[11] There is one issue to be addressed in this review: whether the claims on file lack statutory subject-matter, contrary to section 2 of the *Patent Act*.

LEGAL PRINCIPLES AND PATENT OFFICE PRACTICES

Purposive construction

[12] In accordance with *Free World Trust v. Électro Santé Inc.*, 2000 SCC 66 (*Free World*), 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, (*Whirlpool*)). In accordance with the *Manual of Patent Office Practice*, revised June 2015 (CIPO) at §13.05 (*MOPOP*), the first step of purposive claim construction is to identify the person of ordinary skill in the art (“POSITA”) and their relevant common general knowledge (“CGK”). The next step is to identify the problem addressed by the inventors and the solution disclosed in the application. Essential elements can then be identified as those elements of the claims that are required to achieve the disclosed solution.

Statutory subject-matter

[13] 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.

[14] The Office examination memo PN2013-03 entitled “*Examination Practice Respecting Computer-Implemented Inventions*” (“PN2013-03”) clarifies examination practice with respect to the Office’s approach to computer implemented inventions.

[15] As stated in PN2013-03, 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 (for example, fine arts, methods of medical treatment, features lacking in physicality, or claims 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*.

ANALYSIS

Purposive construction

The POSITA and the relevant CGK

[16] In the Panel Letter, we adopted the assessments of the POSITA and the CGK made in the FA.

[17] The Applicant did not indicate disagreement with that approach in the Reply or during the oral submissions at the Hearing.

[18] Accordingly, the POSITA includes traders of financial instruments and information technology experts with a background in computerized financial trading data processing systems.

[19] With respect to the CGK possessed by the POSITA, as set out in the Panel Letter, it includes skills and experience in:

- trading of financial instruments that mirror or track the performance of a market index;
- trading of financial instruments involving trading facilities and exchanges;
- risk mitigation through hedging; and
- computer components, devices, networks, and computer applications, including their design, implementation, operation and maintenance, including, but not limited to:
 - general purpose computers, special purpose computers, computing devices, processors, and user interfaces of a financial trading system);
 - computer networks, data communications, and internetworking technologies and protocols;
 - computer databases; and
 - computer software programs.

The problem to be solved and the proposed solution

[20] In the Panel Letter, we identified the problem to be solved as a “need for financial instruments that would allow an investor to invest in prior, current and future versions of a market index.”

[21] The Applicant acknowledged in the Reply letter that the above-identified problem to be solved “is not unreasonable so far as it goes”.

[22] Nonetheless, the Applicant submitted at the Hearing that trading should also be an aspect of the problem to be solved by the invention (at least regarding the embodiments defined in claims 1, 14 and 16) because an investor’s flexibility given by the financial instrument is of no use unless the financial instrument is traded.

[23] Although we agree that the contemplated financial instrument is tradable, it is tradable in the same way the “classical” financial instruments that mirror the performance of a market index or any other commonly known financial instrument is tradable. Therefore, in our view, the problem does not involve any issues

specifically related to the trading of a financial instrument that tracks a serialized index once such instrument has been created.

- [24] However, we consider that our statement of the problem to be solved may be rephrased to more explicitly denote the inherent tradability of the financial instrument. Therefore, we are of the view that the POSITA would consider that the problem to be solved is a need for a new type of financial instrument *to trade*, one that would allow an investor to invest in prior, current and future versions of a market index.
- [25] With respect to the solution, we expressed the view in the Panel Letter that “the POSITA would consider that the proposed solution to the identified problem is to provide a new type of financial instrument that tracks a serialized index wherein each financial instrument specifies which version (past, present or future) of a serialized index the financial instrument tracks” (“Panel-identified solution”).
- [26] In the Reply on page 7, the Applicant expressed its disagreement with the Panel-identified solution and submitted that the proposed solution is “to provide a novel method and a novel system for handling and in turn creating financial instruments to track any version of a serialized index and in turn to specify the tracked version (“**Applicant-identified solution**”)” [Emphasis in the original].
- [27] In our view, the solution to a need for a new type of financial instrument to trade (i.e., one that would allow an investor to invest in prior, current and future versions of a market index) does not entail a novel method and/or a novel system for handling the needed financial instrument because we consider that a method or a system for handling/trading the new type of financial instrument is outside the concerns of the identified problem.
- [28] The Applicant also disagreed with the Panel’s preliminary view that the creation of the version of a serialized index specified by a financial instrument after the trade of

the instrument is not essential to the creation of the instrument itself. The Applicant pointed out that “the desired financial instrument is created only after the trade for the listed financial instruments is executed” and that “the creation of the version of a serialized index specified by the financial instrument after the trade of the contemplated financial instrument is executed, as recited in claim 1, guarantees that the created financial instrument tracks all versions of a serialized index so as to accurately reflect them to enable an investor to invest in any version of the index”.

[29] We consider that the POSITA would understand from the specification as a whole that the financial instrument is not created only after the trade for the listed financial instrument is executed. Rather, it is the serialized index specified by the financial instrument that is created after the trade.

[30] In light of the above, it is our view that the solution to the identified problem is the provision of the new type of financial instrument *per se* (the “Panel-identified solution”). This solution will guide our analysis with regard to the elements of the claims that are essential to the creation of the new type of financial instrument.

The essential elements that solve the identified problem

[31] In the Panel Letter, we identified independent claims 1, 14, 16 and 25 as representative of the claimed subject-matter. The claims read as follows:

1. A method of trading financial instruments, comprising: listing via one or more computing devices a financial instrument, said financial instrument specifying which version of a serialized index the financial instrument tracks; receiving at an electronic financial exchange an electronic indication to buy or sell the financial instrument; the electronic financial exchange executing a trade involving the financial instrument; settling the financial instrument according to the version of the serialized index specified by the financial instrument; and wherein the version specified by the financial instrument is created after the trade is executed.

14. A method of trading financial instruments, comprising: generating via one or more computing devices a financial instrument and specifying which version of a serialized index the financial instrument tracks; listing via one or more computing devices the financial instrument, said financial instrument specifying which version of a serialized index the financial instrument tracks; receiving at an electronic financial exchange an electronic indication to buy or sell the financial instrument; the electronic financial exchange executing a trade involving the financial instrument; and settling the financial instrument according to the version of the serialized index specified by the financial instrument.

16. A method of trading financial instruments, comprising: generating via one or more computing devices a serialized index comprised of a plurality of index versions; generating via one or more computing devices one or more financial instruments that track the plurality of index versions; listing for trading via one or more computing devices the one or more financial instruments, wherein each of the one or more financial instruments track a different one of the plurality of index versions; and executing via one or more computing devices at least one trade involving at least one of the one or more financial instruments.

25. A method for maintaining a serialized index, comprising: defining, by one or more computing devices, one or more versions of a serialized index; transmitting a first of the one or more versions of the serialized index to one or more financial institution servers; and transmitting a second of the one or more versions of the serialized index to the one or more financial institution servers, wherein the first and second versions of the serialized index are simultaneously tracked by two or more financial instruments.

[32] On page 4, the FA identified the following elements from the above claims:

- A. generating a serialized index comprised of one or more index versions (claims 16 and 25; inferred in claims 1 and 14);
- B. communicating the one or more versions of the serialized index to one or more financial institutions (claim 25; inferred in claims 1, 14, and 16);
- C. generating one or more financial instruments that track the one or more index versions (claims 14, 16, and 25; inferred in claim 1);
- D. listing the one or more financial instruments (claims 1, 14, and 16);

- E. receiving orders to buy or sell the one or more financial instruments (claims 1 and 14; inferred in claim 16);
- F. completing a trade of the one or more financial instruments (claims 1, 14, and 16);
- G. settling the trade according to the version of the serialized index specified by the one or more financial instrument (claims 1 and 14; inferred in claim 16).

[33] In the Panel Letter, we expressed the preliminary view that the POSITA would consider that the one or more financial instruments that each specifies which past, present or future version of a serialized index it tracks is the only essential element of the independent claims on file.

[34] In the Reply and/or at the Hearing, the Applicant resubmitted arguments presented during the pre- and post-FA prosecution and presented additional submissions as to why the essential elements of the claims on file should not be limited to one or more financial instruments that each specifies which past, present or future version of a serialized index it tracks. These submissions on this point can be summarized as follows:

- i) The Examiner's and Panel's analyses were guided by the examination memo PN2013-03 that detailed the Office's approach to computer implemented inventions and the Office approach to claim construction set out in MOPOP §13.05. These approaches are not in compliance with existing legal authorities on purposive construction, notably with the principles set out in *Free World* and *Whirlpool*, as well as recent interpretations of *Free World* (see *Shire Canada Inc. v. Apotex Inc.*, 2016 FC 382 and *Bauer Hockey Corp. v. Easton Sports Canada Inc.*, 2010 FC 361). More specifically, the Applicant submits that a claim element cannot be found to be non-essential despite the inventor's intention expressed explicitly or by implication in the claim language;
- ii) All elements A-G (listed above) provide the complete solution to the problem to be solved, and not only the element of "generating one or more

financial instruments that each specifies which past, present, or future version of a serialized index it tracks” as alleged by the Panel; and

iii) The recited computer components or computerized features are essential to solve the Panel-identified problem because:

(a) there are technical deficiencies of existing systems that make them incapable of handling and in turn providing financial instruments as described in the present application; and

(b) it would not be reasonable to find that the identified POSITA would not consider the recited computer components or computerized features essential.

Our responses to the above submissions are as follows.

i) Office’s approach to purposive construction

[35] In the Panel Letter, we addressed the Applicant’s past submissions with regard to the Office’s approach to purposive construction and its compliance with the jurisprudence.

[36] In our view, having considered the Applicant’s arguments, the jurisprudence cited by the Applicant continues to follow and draw on the principles of purposive construction as established in previous jurisprudence such as *Free World Trust* and *Whirlpool*. The cited jurisprudence establishes, among other principles, that the claim language is to be construed based on a reading of the patent as a whole from the point of view of the skilled person, that purposive construction cannot be determined solely on the basis of a literal reading of the patent claims, and that because claim language may be deliberately or inadvertently deceptive, a feature of a claim may not form part of the set of essential elements of a claimed invention.

[37] The guidance of *MOPOP* at §13.05.02*b* outlines the Office's interpretation of Canadian patent law in respect of purposive construction as applied to the examination of a patent application. The Office practice specifies that a properly informed purposive construction must consider the specification as a whole, as read through the eyes of the POSITA, against the background of the CGK in the field or fields relevant to the invention, so as to identify the problem and solution addressed by the application. The identification of the problem is guided by the examiner's understanding of the CGK in the art and by the teachings of the description. The solution to that problem informs the identification of the essential elements: not every element that has a material effect on the operation of a given embodiment is necessarily essential to the solution.

[38] Having considered the Applicant's submissions and the prosecution of the application, we are of the view that purposive construction of the claims was conducted in a manner consistent with the Office's approach to purposive construction.

ii) All elements A-G provide the complete solution to the problem to be solved

[39] The Applicant's submissions that it is all the elements A-G that provide the complete solution to the problem to be solved are based on the Applicant-identified solution. However, for the reasons detailed above and in the Panel Letter, we do not accept the Applicant-identified solution. In our view, the solution to the identified problem is the new type of financial instrument *per se*.

iii) Essentiality of the computer components or computerized features

[40] In the Reply, the Applicant submitted that there are technical deficiencies of existing systems that make them incapable of handling and in turn providing financial instruments as described in the present application and hence all the recited computer components or computerized features are essential to solving the Panel-identified problem.

- [41] We respectfully disagree. First, we stated above that we consider that the solution to a need for a new type of financial instrument to trade does not entail a novel method or novel system for handling the proposed financial instrument. In our view, the computer components or computerized features recited in the claims are outside the concern of the identified problem and therefore not essential to the identified solution.
- [42] Further, the instant specification does not highlight particular deficiencies in conventional electronic financial exchange computer systems and we are not aware of any statements in the description that indicate that creating and trading the proposed financial instrument necessarily requires addressing technical deficiencies of existing systems. In that regard, we are of the view that the existing financial exchange systems are able “to generate and manage multiple indexes and the linking of indexes with financial instruments”, a functionality specified in the Reply as lacking in existing systems. This view is supported by the CGK described above with respect to existing financial exchange systems that allow the generation and trading of multiple “classical” financial instruments that attempt to mirror the performance of different market indexes or that are linked to the value of a market index on a specified date. We consider that listing and trading financial instruments that specify which index A, B or C it tracks instead of listing and trading financial instruments that specify which version 1, 2 or 3 of an index it tracks is essentially the same.
- [43] At the Hearing, the Applicant submitted that it would not be reasonable to find that that the POSITA would not consider the recited computer components or computerized features essential. The Applicant argued that traders of financial instruments and information technology experts with a background in computerized financial trading data processing systems would not find a computer to be an optional choice of working environment for this invention, would not turn to mental steps or pen and paper to perform the invention and would not consider that financial

trading including reviewing past present and future values to create a trade in real time can be done without a computer.

[44] As mentioned above, *MOPOP* at §13.05.02c provides guidance that not every recited claim element that has a material effect on the operation of a given embodiment is necessarily essential to the solution. We are of the view that computer elements such as processors, computing devices, modules, servers, etc. are not elements that are material to the solution to the problem set out above. We consider that the POSITA would understand that such components define the specific working environment for the invention. Any advantages to using computerized features to perform the invention flow from the known capabilities of computers in performing calculations as well as manipulating, organizing and storing data. Accordingly, we maintain our view that the POSITA would consider that the recited computer elements constitute a convenient operating environment but that none of the recited computer elements is essential to the provision of a new type of financial instrument to trade, one that would allow an investor to invest in prior, current and future versions of a market index.

[45] Furthermore, while we agree that it is reasonable to argue that the POSITA could use convenient computing devices rather than mental or pen and paper means to perform the invention, as we stated in the Panel Letter, given the nature of the recited financial instrument and the serialized index tracked by it, the recited financial instruments may nonetheless be provided and traded by alternate manual and mental means. With respect to the alleged “real time” aspect of the invention, we note that this aspect was not argued to be part of the problem to be solved, was not argued to be part of the Applicant-identified solution, is not a feature found in the claims on file or in the proposed claims and is not implicitly or explicitly highlighted in the instant specification as a feature critical to the creation and the trade of the new type of financial instrument or the maintenance of a serialized index tracked by the financial instrument.

[46] In view of the above and for the reasons detailed in the Panel Letter, our view is that the POSITA would consider that the only essential element of the claims on file is one or more financial instruments that each specifies which past, present or future version of a serialized index it tracks.

[47] Further, even had we considered all the steps recited in the claims on file with regard to trading a financial instrument or maintaining a serialized index essential, we would still have been of the view that the POSITA would consider that the recited computer components define the specific working environment for the invention, are not addressing a computer-related problem and are therefore non-essential. We would also have been of the view that the POSITA would consider that all the recited steps may be performed by alternate manual and mental means, thus also rendering the computer components non-essential.

[48] Having reviewed independent claims 8, 29 and 38 and all dependent claims, we consider that these claims contain further limitations that define non-essential computer components capable of performing the steps recited in the claims. Accordingly, we are of the view that the POSITA would consider that the essential element of those claims is also one or more financial instruments that each specifies which past, present or future version of a serialized index it tracks.

Conclusion with respect to the purposive construction of the claims on file

[49] In light of the above and the reasons detailed in the Panel Letter, our view is that the POSITA would consider that the essential element of independent claims 1, 14, 16 and 25, independent claims 8, 29 and 38 and all dependent claims, as construed, is one or more financial instruments that each specifies which past, present or future version of a serialized index it tracks.

Statutory subject-matter

[50] In the Panel Letter, we stated that each contemplated financial instrument is a disembodied and intangible tradable legal agreement that is based on an underlying intangible serialized index version that it tracks. We considered that such matter is not something with physical existence or something that manifests a discernible effect or change of character or condition in a physical object and, accordingly, expressed the preliminary view that claims on file do not define statutory subject-matter.

[51] In the Reply and/or at the Hearing, the Applicant submitted that:

- i) The Panel's interpretation of the definition of "invention" offered in *Canada (Attorney General) v. Amazon.com, Inc.*, 2011 FCA 328 (*Amazon*) cannot preclude the claimed subject-matter from patentable categories of an invention because:
 - (a) A financial instrument *per se* has a physical existence once it is printed and can be transmitted and traded as a product;
 - (b) The financial instrument records all variable versions of an index that is noticeable to investors in real time, which can be understood as a discernible effect or change; and
 - (c) In the course of generating the financial instrument, the listing, receiving, executing and trading of the financial instrument are all related to physical manipulation of the financial instrument by either manual or electronic means.
- ii) The refusal of the present application is not grounded in the currently governing legal authorities regarding the determination of patentable subject-matter, and thus does not comply with the *Patent Act*.

- iii) *Amazon* supports the point that a business method without the involvement of a computer is not necessarily non-patentable;
- iv) *Amazon* does not necessarily require physical change; and
- v) *Amazon* set out that whether *Schlumberger v. Commissioner of Patents* 63 C.P.R. (2nd) 261 (*Schlumberger*) can be distinguished depends on the nature of the inventive aspect of the claimed invention and that the claimed computerized features should be considered as part of the inventive aspect of the claimed subject-matter.

Our responses to the above submissions are as follows.

i) The claims encompass subject-matter that has a physical existence, is related to physical manipulation and/or can be understood as a discernible effect or change

[52] It is our view, as previously expressed in the Panel Letter, that each contemplated financial instrument is a disembodied and intangible tradable legal agreement that is based on an underlying serialized index (a series of intangible mathematical constructs) version that it tracks. In our view, such matter is not something with physical existence or something that manifests a discernible effect or change of character or condition in a physical object. Even if a purposive construction had considered all the steps involved in trading financial instruments or the maintenance of a serialized index to be essential steps (which we did not for the reasons stated above), it would not have changed our expressed view with regard to the subject-matter of the claims on file because none of the steps manifests a discernible effect or change of character or condition in the financial instrument as only the abstract concept of ownership of the legal agreement is modified. We have the same view with regard to a method of maintaining a series of intangible mathematical constructs that represent a serialized index, and the steps of abstractly defining one or more

versions of a serialized index and transmitting information about the one more versions.

ii) The refusal of the present application is not grounded in the currently governing legal authorities regarding the determination of patentable subject-matter

[53] We consider that the essential element of the construed claims on file (i.e., one or more financial instruments that each specifies which past, present or future version of a serialized index it tracks) is limited to matter excluded from the definition of invention under section 2 of the *Patent Act* because such an abstract concept is not something with physical existence or something that manifests a discernible effect or change of character or condition in a physical object and hence, according to the guidance found in examination memo PN2013-03, the claims on file are not compliant with section 2 of the *Patent Act*.

iii) Amazon supports that a business method without the involvement of a computer is not necessarily non-patentable subject-matter

[54] We note that this review is not concerned with whether or not the invention is a computer-implemented business method, but rather whether the purposively construed claimed method of trading financial instruments or maintaining a serialized index comprises one or more essential elements that are limited to matter excluded from the definition of invention by statute or jurisprudential proscriptions. Our view expressed above is that they do.

iv) Amazon does not necessarily require physical change

[55] According to the Applicant, the claims at issue in *Amazon* and ultimately granted by the Office involved a buyer, a seller, computers, data inputs, data manipulations and the conclusion of the transaction. Therefore, the Applicant submitted that no distinction can be made with the claims on file or the proposed claims on physical change. We consider that each case should be reviewed based on its own merits. It

is sufficient to say that we consider in the instant case that the recited computer components and computerized features are not essential elements.

v) *The instant case can be distinguished from Schlumberger*

[56] Whether or not the instant case is distinguishable from *Schlumberger* depends upon how the claims are construed (see *Amazon* at para 63). Based on a construction of the claims in accordance with the Office's approach to purposive construction, the computer components or computerized features have been found to be non-essential for the reasons detailed above. Instead, we considered that the only essential element of the claims is a disembodied and intangible tradable financial instrument and considered that, in any event, the recited non-essential steps permitting the trade of the new financial instruments or the maintenance of a serialized index may also be performed by alternate manual and mental means. Accordingly, we are of the view that the considerations of *Schlumberger* are directly applicable to the present subject-matter because if the steps permitting the trade of the new financial instruments or the maintenance of a serialized index were not to be effected by computer elements, the claims would not define statutory subject-matter as the recited financial instruments and steps do not involve something with physical existence and do not manifest a discernible effect or change of character or condition in a physical object.

Conclusion with respect to the subject-matter of the claims on file

[57] In view of the above, we consider that the claims on file as construed do not define statutory subject-matter and therefore do not comply with section 2 of the *Patent Act*.

Proposed Claims

Proposed claims 1-41

[58] In the Panel Letter, having assessed the proposed claims 1-41, we stated that our view with regard to the non-statutory nature of the subject-matter of the claims on file would not have changed if the proposed claims 1 to 41 were adopted. We therefore stated that the proposed claims do not meet the requirements of a

“necessary” amendment under subsection 30(6.3) of the *Patent Rules*. The Applicant did not specifically address our view with regard to proposed claims 1 to 41 in the Reply or at the Hearing.

[59] Given our views expressed above with regard to the problem to be solved, the identified solution and the essential element of the claims on file, which are consistent with our preliminary view set out in the Panel Letter, we maintain that our view concerning the non-statutory nature of the subject-matter of the claims on file also applies to proposed claims 1 to 41.

Additional proposed claim 42

[60] In the Reply and at the Hearing, the Applicant submitted that the additional proposed new claim 42 received with the Reply comprises statutory subject-matter at least because:

- It recites a system that provides a computerized solution for tracking indexes that relate to one another and linking the tracked indexes to financial instrument offerings and also solves the practical problem of making trades;
- It recites a number of technical features directed to solving the real-world problem of managing related indexes; and
- It is no different that the claims at issue in *Amazon* and eventually granted by the Office.

[61] We consider that additional proposed claim 42 sets out a system comprising three servers respectively performing the functions of:

- (a) creating and maintaining a serialized index;

- (b) creating and maintaining a financial database comprising information related to financial instrument offerings wherein the financial instrument offerings track the related versions of the serialized index; and
- (c) listing the financial instrument offerings, receiving orders to buy or sell the financial instrument offerings, completing a trade of the financial instrument offerings and settling the financial instrument offerings.

[62] As for the claims on file, we are of the view that the problem to be solved is a need for a new type of financial instrument to trade, one that would allow an investor to invest in prior, current and future versions of a market index and that the corresponding solution is the new type of financial instrument *per se*. Given said identified problem and solution, we consider that the essential element of additional proposed claim 42 is the financial instrument offerings *per se*, a corresponding equivalent of the one or more financial instruments that each specifies which past, present or future version of a serialized index it tracks. Accordingly, the additional proposed claim 42 would not alter the outcome of the subject-matter analysis provided with respect to the claims on file.

[63] Further, we already considered in our analysis of the claims on file similar elements as those listed in (a) to (c) above, as well as the corresponding computer components. We stated that had we considered essential all the elements with regard to trading a financial instrument or maintaining a serialized index, we would have been of the view that the POSITA would consider that the recited computer components define the specific working environment for the invention and are therefore non-essential. We also stated that we would also have been of the view that the POSITA would consider that all the computerized steps or features may be performed by alternate manual and mental means.

[64] Therefore, we consider that our views concerning the non-statutory nature of the subject-matter of the claims on file also apply to the additional proposed claim 42 because the differences in the additional proposed claim 42 would not have altered our conclusions with regard to the problem to be solved, the identified solution or the essential element.

Conclusion with respect to the subject-matter of proposed claims 1-42

[65] It follows that we do not consider that the proposed claims 1 to 42 constitute specific amendments that are “necessary” under subsection 30(6.3) of the *Patent Rules*.

RECOMMENDATION OF THE BOARD

[66] We recommend that the application be refused on the basis that claims 1 to 41 on file define non-statutory subject-matter and thus do not comply with section 2 of the *Patent Act*.

[67] We are also not satisfied that specific amendments proposed by the Applicant are necessary for compliance with the *Patent Act* and *Patent Rules*. Accordingly, we decline to recommend that the Commissioner notify the Applicant under subsection 30(6.3) of the *Patent Rules* that they are necessary.

Marcel Brisebois
Member

Stephen MacNeil
Member

Andrew Strong
Member

DECISION

[68] I concur with the findings of the Patent Appeal Board and its recommendation that the application should be refused because the claims on file do not comply with section 2 of the *Patent Act*.

[69] Accordingly, 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 12th day of February, 2018