

Citation: Lynn Tilton (Re), 2020 CACP 2
Commissioner's Decision #1522
Décision du Commissaire #1522
Date: 2020-04-07

TOPIC: J-00 Meaning of Art

J-50 Mere Plan

B-00 Indefiniteness

SUJET: J-00 Signification de la technique

J-50 Simple Plan

B-00 Indéfini

Application No. : 2,468,872

Demande n° 2 468 872

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,468,872, having been rejected under subsection 30(3) of the *Patent Rules* (SOR/96-423) as they read immediately before October 30, 2019, has consequently been reviewed in accordance with paragraph 199(3)(c) of the *Patent Rules* (SOR/2019-251). The recommendation of the Board and the decision of the Commissioner are to refuse the application.

Agent for the Applicant:

GILBERT'S LLP
77 King Street West Suite 2010
PO Box 301
Toronto, Ontario
M5K 1K2

INTRODUCTION

- [1] This recommendation concerns the review of rejected Canadian patent application number 2,468,872 which is entitled “METHOD OF SECURITIZING A PORTFOLIO OF AT LEAST 30% DISTRESSED COMMERCIAL LOANS” and is owned by Lynn Tilton (the Applicant).
- [2] A review of the rejected application has been conducted by the Patent Appeal Board (the Board) pursuant to paragraph 199(3)(c) of the *Patent Rules* (SOR/2019-251). As explained in more detail below, our recommendation to the Commissioner of Patents is to refuse the application.

BACKGROUND

The application

- [3] Canadian patent application 2,468,872, based on a previously filed Patent Cooperation Treaty application, is considered to have a filing date of November 22, 2002, and was laid open to public inspection on June 12, 2003.
- [4] The application relates to financial asset securitization. More specifically, it is directed to a method of securitizing a loan portfolio of at least 30% distressed commercial loans.

Prosecution history

- [5] On April 27, 2017, a Final Action (FA) was issued pursuant to subsection 30(4) of the *Patent Rules* (SOR/96-423) as they read immediately before October 30, 2019, in which the application was rejected on the basis of non-statutory subject-matter. The FA stated that claims 1 to 24, dated August 27, 2015 (the claims on file) did not comply with section 2 of the *Patent Act*.
- [6] On October 26, 2017, a response to the FA (R-FA) was filed by the Applicant. In the R-FA, the Applicant argued that the claims on file constituted an invention as defined in section 2 of the *Patent Act*.
- [7] Since the Examiner maintained the position that the application did not comply with section 2 of the *Patent Act* after considering the R-FA, the application was forwarded to the Board on December 15, 2017, along with a Summary of Reasons (SOR). In the SOR, the Examiner stated that claims on file were still considered to be directed to non-statutory

subject-matter and did not comply with section 2 of the *Patent Act*.

- [8] The SOR was forwarded to the Applicant on December 19, 2017 by the board. On August 2, 2019, a verbal communication from the Applicant's representative was received, indicating its continued interest in the application being reviewed by the Board.
- [9] The present panel (the Panel) was formed to review the application under paragraph 199(3)(c) of the *Patent Rules*.
- [10] In a preliminary review letter dated October 21, 2019 (PR letter), the Panel presented its preliminary analysis and rationale as to why the subject-matter of the claims on file did not comply with section 2 of the *Patent Act*. In the PR letter, the Panel also considered that claims 1 and 10 were indefinite and did not comply with subsection 27(4) of the *Patent Act*. The PR letter also offered the Applicant the opportunities to make written submissions and to attend a hearing.
- [11] In a letter dated November 8, 2019, the Applicant requested an oral hearing.
- [12] In a response to the PR letter (R-PR) dated November 21, 2019, the Applicant contended that the application is directed to patentable subject-matter, and submitted a new set of claims (the proposed claims) in an effort to overcome the indefiniteness defect raised in the PR letter.
- [13] An oral hearing was held before the Panel on December 6, 2019 (the hearing).

ISSUES

- [14] There are two issues to be considered in this review:
- Whether the claims on file define subject-matter falling within the definition of invention in section 2 of the *Patent Act*; and
 - Whether claims 1 and 10 on file distinctly and explicitly define the invention and thus comply with subsection 27(4) of the *Patent Act*.
- [15] In this review, we will first address the subject-matter issue for the claims on file. Second, we will consider the indefiniteness issue for claims 1 and 10. Finally, we will consider whether the proposed claims would constitute a necessary amendment under subsection 86(11) of the *Patent Rules*.

LEGAL PRINCIPLES AND PATENT OFFICE PRACTICE

Purposive construction

[16] In accordance with *Free World Trust v Électro Santé Inc*, 2000 SCC 66, 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 v Camco*, 2000 SCC 67 at paras 49(f) and (g) and 52). In accordance with the *Manual of Patent Office Practice* (CIPO) at §12.02, revised June 2015 [*MOPOP*], the first step of purposive claim construction is to identify the skilled person and his or her 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

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

“[I]nvention” 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.

[18] Following the Federal Court of Appeal decision in *Canada (AG) v Amazon.com*, 2011 FCA 328 [*Amazon*], the Office released an examination memo “Examination Practice Respecting Computer-Implemented Inventions”, PN2013-03 (CIPO, March 2013) [*PN2013-03*] that clarified the Office’s approach to determining if a computer-related invention is statutory subject matter.

[19] As indicated in *PN2013-03*, section 2 of the *Patent Act* provides the definition of invention and must be read in conjunction with subsection 27(8) of the *Patent Act*, which excludes mere scientific principles and abstract theorems. Disembodied inventions (e.g. mere ideas, schemes, plans or sets of rules, etc.) are not included within the meaning of section 2 of the *Patent Act*. Where a computer is found to be an essential element of a construed claim, or if the claim is directed to a technical solution to a technical problem, the claimed subject-matter will generally be statutory. On the other hand, if it is determined that the essential elements of a construed claim are limited to only matter excluded from the definition of invention, and does not define “something with physical existence, or something that manifests a discernable effect or change” (*Amazon*, paragraph 66), the claim is not compliant with section 2 of the *Patent Act*, and consequently, not patentable.

[20] In the R-FA (pages 2 to 16), R-PR (pages 2 to 5), and during the hearing, the Applicant contended that the Office practice regarding purposive construction provides improper guidance and is inconsistent with binding jurisprudence.

[21] The Office practice described in *MOPOP* and *PN2013-03* was developed in response to *Amazon* and reflects 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 application as a whole, as read through the eyes of the person skilled in the art, 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 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.

Indefiniteness

[22] Subsection 27(4) of the *Patent Act* requires claims to distinctly and explicitly define subject-matter:

The specification must end with a claim or claims defining distinctly and in explicit terms the subject-matter of the invention for which an exclusive privilege or property is claimed.

[23] In *Minerals Separation North American Corp v Noranda Mines Ltd*, [1947] Ex CR 306, 12 CPR 99 at page 146, the Court emphasized both the obligation of an applicant to make clear in the claims the ambit of the monopoly sought and the requirement that the terms used in the claims be clear and precise:

By his claims the inventor puts fences around the fields of his monopoly and warns the public against trespassing on his property. His fences must be clearly placed in order to give the necessary warning and he must not fence in any property that is not his own. The terms of a claim must be free from avoidable ambiguity or obscurity and must not be flexible; they must be clear and precise so that the public will be able to know not only where it must not trespass but also where it may safely go.

ANALYSIS

Purposive construction

[24] There are 24 claims on file, including independent claims 1 and 10, and dependent claims 2 to 9 and 11 to 24. In our view, claims 1 and 10 are representative of the claims on file:

1. A computerized method for assembling a commercial loan portfolio, comprising the steps of:

using at least one computer for selecting a plurality of commercial loans from among a group of commercial loans to create a loan portfolio in which loans comprising at least thirty percent (30%) of (i) the portfolio market value, (ii) the portfolio outstanding principal balance, or (iii) the portfolio commitment amount, are distressed loans which: (i) have a payment default, or (ii) where payment default is considered likely;

creating a data base in the one or more computers for each commercial loan in the selected group of loans, said data base comprising tabulated information stored in fields of the data base including: (i) recovery rate information comprising borrower cash flow, projected net payments, and related collateral; and at least one of the following: (ii) borrower cash flow information, (iii) loan information including principal amount, interest rate, unfunded commitment amounts, credit information, and amortization information, (iv) loan pricing parameters, (v) loan cash pay rate information, (vi) loan collateral value, (vii) workout parameters including borrower debt capacity and liquidation information, and (viii) loan discounted cash flow valuation, said computerized data base being stored in a computer-readable memory;

determining anticipated cash flows from each commercial loan in the selected plurality of commercial loans; and

establishing a purchase price for each commercial loan in the selected plurality of commercial loans as a display value for display on a screen or printing.

10. A computerized method of creating a capital structure to securitize a loan portfolio, comprising the steps of:

using one or more computers for selecting a plurality of commercial loans from among a group of loans to create a loan portfolio in which loans comprising at least thirty percent (30%) of (i) the portfolio market value, (ii) the portfolio outstanding principal balance, or (iii) the portfolio commitment amount, are distressed loans which: (i) have a payment default, or (ii) where payment default is considered likely;

creating a data base in the one or more computers for each loan in the selected group of loans, said data base comprising tabulated information stored in fields of the data base including: (i) recovery information comprising borrower cash flow, projected net payments, and related collateral; (ii) loan information including principal amount, interest rate, unfunded commitment amounts, credit information, and amortization information; (iii) loan pricing parameters; (iv) loan collateral value; (v) workout parameters including borrower debt capacity and liquidation information; and (vi) loan discounted cash flow valuation, said computerized data base being stored in a computer-readable memory;

adding loans to, and/or subtracting loans from the loan portfolio in order to emulate cash flow and recovery characteristics of a portfolio of performing loans; and

establishing the loan portfolio as a display value for display on a screen or printing.

[25] Dependent claims 2 to 9 and 11 to 24, which are directly or indirectly dependent upon claim 1 and claim 10, respectively, recite further limitations and will be discussed

following the analysis of independent claims 1 and 10.

The person skilled in the art

[26] In the PR letter at page 5, we adopted the identification of the person skilled in the art (POSITA) as stated in the FA at page 2:

The person, or team, skilled in the art is skilled in the field of investment strategies and grade ratings with specific knowledge in loan portfolio creation, risk analysis of the portfolio and pricing strategies for the portfolio. Also, one skilled in the art would be versed in general purpose computing programs specifically relating to financial databases and spreadsheet applications (paragraphs 0001-0010).

[27] The Applicant did not dispute this characterization in the R-PR. During the hearing, the Applicant substantially agreed with this identification. We adopt this characterization of the POSITA in this review.

The common general knowledge

[28] We adopt for this review the identification of the CGK of the skilled person from the PR letter at page 5 as stated in the FA at page 2:

- knowledge of general computing platforms and associated financial databases and spreadsheet software;
- knowledge of credit facilities and commercial loans (page 2 of the application, paragraph [0002]);
- knowledge of classification of loans including distressed loans wherein there has been a default by a borrower to make a payment or payments to a lender, and/or a likelihood of a default has been identified by a lender in connection with the borrower's obligation to make a payment to the lender (page 2 of the application, paragraphs [0002] and [0003]); and
- distressed loans are subject to increased monitoring and may be subject to special accounting treatment including increased capital requirements and regulatory scrutiny (pages 2 to 7 of the application, paragraphs [0003] to [0011]).

[29] The Applicant did not dispute this characterization in the R-PR. During the hearing, the Applicant substantially agreed with this identification. We adopt this characterization of the CGK in this review.

Problem and solution

[30] As explained in the PR letter, the FA (page 3) identified the problem in the prior art based on the description at paras [0001] to [0012]. In these paragraphs, the application recites deficiencies of the related art: lenders holding distressed credit facilities face limited unfavorable choices, such as hold or sell at a significant discount, which would cost the lenders substantial time and capital. Furthermore, prior to the invention it was impractical and not cost-effective to securitize a portfolio of distressed loans because of the inability to obtain all investment grade ratings for the issuance of asset-backed debt securities.

[31] Having considered the above cited paragraphs in the context of the entire specification, and based on the CGK of the skilled person, the PR letter at page 6 set out what the skilled person would understand as the problem and solution being addressed by the application:

[T]he problem to be solved as seen by the POSITA with their CGK is a need of a method of securitizing a portfolio that includes a significant percentage of distressed commercial loans so that investment grade ratings can be achieved for asset-backed securities based on the portfolio.

...

[T]he proposed solution embodied by the claims is a method of creating a commercial loan portfolio including at least 30% distressed loans. The method comprises a series of business rules including selecting specific commercial loans to create the portfolio, recording financial characteristics of each of the selected loans, determining anticipated cash flows from each of the selected loans, establishing a purchase price for each of the selected loans, and re-organizing the portfolio structure to emulate cash flow and recovery characteristics of a portfolio of performing loans.

[32] In the R-PR at page 3, the Applicant contended:

Applicant submits that the Patent Office practice, as set out in *PN2013-03* and other documents, of determining whether the “problem” (as construed by the Examiner or Board) is a “computer problem” or “technological problem” is not supportable by the *Patent Act* or any applicable jurisprudence thereunder.

Indeed, Applicant is not aware of any statutory provision or case law which requires an invention to solve a “computer problem” in order to be patent-eligible subject matter. Applicant submits that the search for a “computer problem” amounts to an improper “catch phrase” approach which the Federal Court of Appeal warned against in *Amazon.com*, 2011 FCA 328:

...

As presently framed, the Patent Office practice for examination of computer-related inventions results in a different standard applied to this field of invention as compared to

other fields of invention. Applicant submits that the Board must consider, apart from the issue of whether the claimed invention of the present application solves a “computer problem”, whether the claims nonetheless constitute patentable subject matter.

Applicant submits that the presently claimed subject matter as purposively construed is not prohibited by any provision of the *Patent Act* and qualifies as an “invention” under s. 2 of the *Act*.

[33] As indicated in *PN2013-03*, where a computer is found to be an essential element of a construed claim, or if the claim is directed to a technical solution to a technical problem, the claimed subject-matter will generally be statutory. On the other hand, if it is determined that the essential elements of a construed claim are limited to only matter excluded from the definition of invention, the claim is not compliant with section 2 of the *Patent Act*. In our view, although not solving a “computer problem” or “technical problem” does not prohibit an application to be patentable under section 2 of the *Patent Act*, a consideration during the claim construction regarding whether the application is directed to solving a “computer problem” is helpful in determining if computer elements are part of the identified problem or solution, when considering the application as a whole through the eyes of the person skilled in the art, with their CGK.

[34] The problem as recited by the specification of the application at paragraphs [0002] to [0011], and as we identified above, is not directed to any challenges in the operations or implementations of specific computer hardware or software. Although paragraphs [0054], [0058], and [0064] of the specification state that it is “preferable” to process the financial data using “any suitable spread sheet or accounting, financial, or database software” or “commonly available accounting or financial databases and/or spreadsheets”, it does not provide any further details regarding how the software is implemented or used. Based on the absence of any explicit indication in the application that any practical problems relating to the operation of a computer were overcome, and the absence of implementation details regarding the computer, the skilled person would understand that the invention does not lie in the computer implementation.

[35] Therefore, in our view, the computer elements as claimed are not part of the identified problem, or the identified solution. We conclude that the problem and solution are as set out in the PR letter.

The essential elements

[36] The PR letter (pages 7 to 10) identified the essential elements of independent claims 1 and

10 required by the identified solution to address the identified problem. Additional features of dependent claims 2 to 9 and 11 to 24 are also considered regarding their essentiality.

[37] In the R-PR (pages 3 to 4), the Applicant contended:

In the Board's preliminary observations at pp. 7-8, repeating the analysis of the Examiner, the Board appears to identify the essential elements of the claims without taking into account the common general knowledge ("CGK") of the skilled person.

Applicant respectfully submits that the Patent Office practice of excluding the CGK when identifying the essential elements of the claims is inconsistent with the jurisprudence, including the foundational principles of construction stated by the Supreme Court in *Free World Trust*:

...

In effect, by failing to consider the CGK in the essential element analysis, the Board has dispossessed the skilled person of their prerequisite knowledge to interpret the claims, which results in an improper construction.

The Applicant submits that a skilled person fully possessed of their CGK in the field of the present invention would appreciate that claim elements such as "computerized", "at least one computer", "data base", "display value", "screen" and "printing" are necessary to put the invention into practice.

[38] During the hearing, the Applicant further contended that it is improper for the Board to "read out" the computer elements in the claims, as these define the scope chosen by the Applicant.

[39] However, as explained in the PR letter, a person skilled in the art, with their own CGK, would understand that while a computer used to process financial data may be "preferable", as stated by the description, it would not be required to achieve the identified solution. In support of this view, we note that the specification states:

[0054] ... It is preferable to process financial data using computer programming, due to the many variables involved. This information may be organized by way of various commonly available software platforms, such as Microsoft Office 2000.

[0055] As part of the due diligence review, computerized database models or templates, as described below, may be used as a guide to facilitate the quantitative, qualitative and legal evaluation ... [Emphases added]

[40] The skilled person would understand that the computer as recited in the claims is used for general purpose calculation and data processing tasks, which is supported by the lack of implementation details in the specification regarding how the claimed method steps are

implemented with computer technology. As explained in *Schlumberger Canada Ltd v Canada (Commissioner of Patents)*, [1982] 1 FC 845 (CA) [*Schlumberger*], “it is precisely in order to make that kind of calculation that computers were invented.” Needing a computer for its convenience and expedited data processing does not make the computer essential for the working of an invention. As explained earlier, the claimed subject-matter is not directed to solving a computer problem, which is supported by the absence of indication regarding practical problems relating to the operation of a computer, and the absence of implementation details regarding the computer. Without the computer, the claimed method can be achieved by mental process, or simply pen and paper. Similar to *Schlumberger*, using computer technology to implement an abstract process does not render the process patentable.

- [41] During the hearing, the Applicant also argued that the specification disclosed database parameters and operations which were to be implemented by computers.
- [42] However, in our view, the “data base” is directed to the organization of abstract loan securitization parameters. The claimed securitization method does not concern how these parameters are organized. Rather, it concerns what parameters are considered in the securitizing process. The skilled person would understand that the use of a computer to implement the claimed “data base” would not have a material effect on the operation of the solution of assembling a commercial loan portfolio.
- [43] In the R-PR (page 5), the Applicant further contended:

Applicant respectfully submits that it is improper, as the Board and the Examiner have done under present Patent Office practice, to parse the claimed invention into distinct elements and examine whether each individual element is directed to statutory subject matter.

Rather, Applicant respectfully submits that the proper approach must take into account the invention as a whole, including consideration of the tangible result achieved by the whole invention. The presently claimed invention, for example, includes “display on a screen or printing” (as recited in claims 1 and 10) and allowing the portfolio of at least 30% distressed commercial credit facilities to be “amenable to securitization and the issuance of asset-backed debt securities [...] all of which are eligible to receive investment grade ratings” (as disclosed at para. [0012]), which are relevant considerations for statutory subject matter.

- [44] While claim construction during examination must remain anchored in the language of the claims, and considering the application as a whole, it “cannot be determined solely on the basis of a literal reading” of the claims (*Amazon*, para 43). “Purposive construction will necessarily ensure that the Commissioner is alive to the possibility that a patent claim may

be expressed in language that is deliberately or inadvertently deceptive” (*Amazon*, para 44). Therefore, although a properly informed purposive construction must consider the application as a whole, the form of the claim language chosen by the inventor cannot override all other considerations during purposive construction of the claims.

[45] For the application, the skilled person with their CGK, when considering the application as a whole, would not consider the feature of “display value for display on a screen or printing” essential since how the result of the method of creating a loan portfolio is presented is not part of the solution to the problem of securitizing a loan portfolio containing distressed loans.

[46] Furthermore, as explained in *Amazon*, at paragraph 61, “it does not necessarily follow... 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”. For the application, similar to *Schlumberger*, using computers in a practical embodiment to perform calculations and data processing does not render the computer elements as claimed essential, nor does it render the claimed abstract rules regarding securitizing a loan portfolio patentable.

[47] Therefore, it is our view that a proper claim construction would consider the computer elements non-essential to the proposed solution.

Independent claim 1

[48] In our view, claim 1 comprises the following essential elements, which represent a method of assembling a commercial loan portfolio, comprising:

- selecting a plurality of commercial loans from among a group of commercial loans to create a loan portfolio in which loans comprising at least thirty percent (30%) of (i) the portfolio market value, (ii) the portfolio outstanding principal balance, or (iii) the portfolio commitment amount, are distressed loans which: (i) have a payment default, or (ii) where payment default is considered likely;
- recording the following information for each commercial loan in the selected group of loans: (i) recovery rate information comprising borrower cash flow, projected net payments, and related collateral; and at least one of the following: (ii) borrower cash flow information, (iii) loan information including principal amount, interest rate, unfunded commitment amounts, credit information, and amortization information, (iv) loan pricing

parameters, (v) loan cash pay rate information, (vi) loan collateral value, (vii) workout parameters including borrower debt capacity and liquidation information, and (viii) loan discounted cash flow valuation;

- determining anticipated cash flows from each commercial loan in the selected plurality of commercial loans; and
- establishing a purchase price for each commercial loan in the selected plurality of commercial loans.

Independent claim 10

[49] Claim 10 comprises the following essential elements, which represent a method of creating a loan portfolio, comprising:

- selecting a plurality of commercial loans from among a group of loans to create a loan portfolio in which loans comprising at least thirty percent (30%) of (i) the portfolio market value, (ii) the portfolio outstanding principal balance, or (iii) the portfolio commitment amount, are distressed loans which: (i) have a payment default, or (ii) where payment default is considered likely;
- recording the following information for each commercial loan in the selected group of loans: (i) recovery information comprising borrower cash flow, projected net payments, and related collateral; (ii) loan information including principal amount, interest rate, unfunded commitment amounts, credit information, and amortization information; (iii) loan pricing parameters; (iv) loan collateral value; (v) workout parameters including borrower debt capacity and liquidation information; and (vi) loan discounted cash flow valuation;
- adding loans to, and/or subtracting loans from the loan portfolio in order to emulate cash flow and recovery characteristics of a portfolio of performing loans; and
- establishing the loan portfolio.

Dependent claims 2 to 9 and 11 to 24

[50] In the PR letter (pages 9 to 10), we also provided our analysis of the further features of the dependent claims:

Dependent claims 2 to 9 and 11 to 24 set forth the following additional features:

- using a Special Purpose Entity (SPE) as an investment vehicle, whose operations includes paying lending institutions for the portfolio to be transferred, and issuing and administering securities for the portfolio (claims 2, 3, 15, 16, and 18);
- method steps regarding how the loans are selected (claims 4 to 9 and 19 to 24);
- simulating cash flows for recovery scenarios and for a capital structure for the SPE to obtain investment grade credit rating for the securities issued by the SPE (claims 11 and 17);
- recovery parameters used in the recovery scenarios (claim 12);
- contents of the workout parameters (claim 13); and
- contents of the liquidation information (claim 14).

In our preliminary view, these features are directed to different embodiments of the claimed subject-matter such as various loan selection criteria (claims 4 to 9, 12 to 14, and 19 to 24), and the implementation of the identified solution, such as utilization of a SPE as an investment vehicle to process the portfolio (claims 2, 3, 11, and 15 to 18).

Therefore, dependent claims 2 to 9 and 11 to 24 recite further refinements to the elements of the independent claims. The additional business rules recited by these claims are considered to be essential to the claims they belong to. However, for the same reasons as we explained above with regard to the independent claims, the computer is not considered to be essential for the dependent claims since it is not part of the identified solution to the identified solution. These additional features are considered to be mere refinements to the business rules of the independent claims.

Dependent claims 2 to 17, and 20 recite further data manipulation features that reflect different embodiments of the same set of the essential elements as identified above. These claims recite features such as transaction statistics determinations, and vector data manipulations including calculating relationship strengths between pairs of merchants. In our view, all features of these claims are directed to abstract data manipulations and calculations.

[51] Since the Applicant did not dispute our analysis and rationale regarding the dependent claims, other than to argue against the Office practice regarding claim construction generally, as discussed above, we adopt it in this review.

Statutory subject-matter

[52] As indicated in our analysis of the essential elements of the claimed subject-matter, the essential elements of the claims on file comprise abstract data manipulation steps of a method of assembling a commercial loan portfolio. Such subject-matter is directed to a series of abstract rules, which does not comprise matter that manifests a discernible effect or change, and is outside the definition of invention in section 2 as required by the *Patent Act*.

[53] Therefore, claims 1 to 24 on file do not define statutory subject-matter and thus do not

comply with section 2 of the *Patent Act*.

Indefiniteness

[54] In the PR letter, the Panel provided our preliminary view with the following rationale:

Although claims 1 recites a step of creating a data base for each commercial loan in the selected group of loans, the data base comprising tabulated financial information. However, neither the database itself nor the information stored in the database is mentioned in the following steps of determining anticipated cash flows and establishing a purchase price for each commercial loan. The lack of interactions between the claimed method steps creates uncertainty as to the scope of the claimed subject-matter.

Claim 10 is indefinite for the same reasons.

Accordingly, claims 1 and 10 do not comply with subsection 27(4) of the *Patent Act*.

[55] The Applicant did not dispute this view and we adopt it in this review. Therefore, it is our view that claims 1 and 10 on file are indefinite and do not comply with subsection 27(4) of the *Patent Act*.

Proposed claims

[56] In the proposed claims, claims 1 and 10 were amended to overcome the indefiniteness defect identified in the PR letter. In the amendment, the following underlined texts were added:

- [Claim] 1. ... establishing, from the tabulated information stored in fields of the data base, a purchase price for each commercial loan in the selected plurality of commercial loans as a display value for display on a screen or printing.
- [Claim] 10 ... establishing, from the tabulated information stored in fields of the data base, the loan portfolio as a display value for display on a screen or printing.

[57] With respect to the indefiniteness issue, since these amendments provide a link between the recited data and the data used in the subsequent steps of determining anticipated cash flows and establishing a purchase price for each commercial loan, we consider the proposed claims distinctly and explicitly define the scope of the proposed claims 1 and 10, and thus comply with subsection section 27(4) of the *Patent Act*.

[58] With respect to the statutory subject matter issue, since the amendments merely clarify the use of recited data, the proposed claims would not change our identifications of the skilled

person, CGK, problem/solution, and the essential elements. Therefore, the proposed claims 1 to 24 would not comply with section 2 of the *Patent Act*, for the same reasons stated above in our analysis of the claims on file.

[59] Therefore, the proposed claims are not considered “necessary” amendments under subsection 86(11) of the *Patent Rules*, as they do not comply with section 2 of the *Patent Act*.

RECOMMENDATION OF THE BOARD

[60] In view of the above, the Panel recommends that the application be refused on the grounds that the claims on file are directed to non-statutory subject-matter and are therefore non-compliant with section 2 of the *Patent Act*, and claims 1 and 10 on file are indefinite and do not comply with subsection 27(4) of the *Patent Act*.

[61] Further, the proposed claims do not overcome the subject-matter defect and therefore the introduction of these claims does not constitute “necessary” amendments pursuant to subsection 86(11) of the *Patent Rules*.

Liang Ji

Paul Fitzner

Lewis Robart

Member

Member

Member

DECISION OF THE COMMISSIONER

[62] I concur with the findings of the Board and its recommendation that the application should be refused because the claims on file define subject matter falling outside the definition of “invention” and thus do not comply with section 2 of the *Patent Act*, and claims 1 and 10 on file do not comply with subsection 27(4) of the *Patent Act*.

[63] Therefore, in accordance with section 40 of the *Patent Act*, I refuse to grant a patent for this application. Under section 41 of the *Patent Act*, the Applicant has six months to appeal my decision to the Federal Court of Canada.

Johanne Bélisle
Commissioner of Patents

Dated at Gatineau, Quebec,

This 7th day of April 2020