

Citation: TILTON (Re), 2021 CACP 34
Commissioner's Decision #1587
Décision du commissaire n° 1587
Date: 2021-06-30

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 (“*former Rules*”), refused under section 40 of the *Patent Act* and then having had that refusal set aside after appeal to the Federal Court under section 41 of the *Patent Act*, has subsequently been reviewed according to the direction of the Court. The recommendation of the Board and the decision of the Commissioner are to refuse the application.

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INTRODUCTION

- [1] This recommendation concerns the review of rejected Canadian patent application number 2,468,872, entitled “METHOD OF SECURITIZING A PORTFOLIO OF AT LEAST 30% DISTRESSED COMMERCIAL LOANS” and owned by LYNN TILTON (“the Applicant”).
- [2] Pursuant to the judgement of the Federal Court of Canada dated January 19, 2021, the application was remitted to the Commissioner of Patents to reconsider afresh in light of the judgement and reasons in *Choueifaty v Canada (Attorney General)*, 2020 FC 837 [*Choueifaty*]. The Court directed the Commissioner to reconsider the claims on file and the set of proposed claims before the Court.
- [3] A panel of the Patent Appeal Board (“the Board”) has been established to undertake a review of the application on behalf of the Commissioner, in accordance with the Court’s direction. As explained in more detail below, the Board’s recommendation is that the Commissioner of Patents refuse the application.

BACKGROUND

The Application

- [4] The application, based on a previously filed Patent Cooperation Treaty application, is considered to have been filed in Canada on November 22, 2002 and laid open to public inspection on June 12, 2003.
- [5] The application relates to financial asset securitization. More specifically, it is directed to a method of creating and securitizing a loan portfolio of at least 30% distressed commercial loans.

Prosecution History

- [6] On April 27, 2017, the application was rejected in a Final Action (“FA”) issued pursuant to subsection 30(4) of the *former Rules*. 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*.
- [7] On October 26, 2017, in a response to the FA (“R-FA”), the Applicant provided arguments in favour of the patentability of the claims on file for the Examiner to consider.

- [8] As the Examiner maintained the position that the application did not comply with section 2 of the *Patent Act*, 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 thus did not comply with section 2 of the *Patent Act*.
- [9] The SOR was forwarded to the Applicant on December 19, 2017.
- [10] In a verbal communication received on August 2, 2019, the Applicant indicated its continued interest in having the Board review the application.
- [11] In a preliminary review letter dated October 21, 2019 (“PR”), a previous panel of the Board presented its preliminary analysis and rationale as to why the claims on file do not comply with section 2 of the *Patent Act*, and why claims 1 and 10 are indefinite, contrary to section 27(4) of the *Patent Act*. The PR letter also offered the Applicant the opportunities to make written submissions and to attend an oral hearing.
- [12] In a letter dated November 8, 2019, the Applicant confirmed the time and date for the hearing.
- [13] In a response to the PR letter dated November 21, 2019 (“R-PR”), the Applicant contended that the application is directed to patentable subject matter, and submitted a set of claims (the “first proposed claim set”) in an effort to overcome the indefiniteness defect raised in the PR letter regarding claims 1 and 10 on file.
- [14] An oral hearing was held on December 6, 2019.
- [15] Commissioner’s Decision No. 1522 (Lynn Tilton (Re), 2020 CACP 2) [*CD1522*], dated April 7, 2020 and sent to the Applicant by registered mail on April 24, 2020 refused the application on the grounds of lack of statutory subject matter and indefiniteness.
- [16] On September 28, 2020, the Applicant filed a Notice of Appeal with the Federal Court under section 41 of the *Patent Act*, regarding the decision contained in *CD1522* (Court number T-1149-20).
- [17] Contemporaneously, following the decision in *Choueifaty*, the Patent Office issued “Patentable Subject-Matter under the *Patent Act*” (CIPO, November 2020) [*PN2020-04*]. This notice addressed the Office’s current approach to both claim construction and to the

determination of patentable subject matter, in response to the reasoning in *Choueifaty*.

- [18] On January 19, 2021, a Consent Judgement was issued by the Federal Court in response to the Applicant's appeal, setting aside *CD1522* entirely, and directing the Commissioner to review the rejected application afresh in light of the judgement and reasons in *Choueifaty*.
- [19] A new panel of the Board (the "Panel") was formed to perform the review of the application on behalf of the Commissioner. In a Supplemental Preliminary Review letter ("SPR") dated March 10, 2021, this Panel provided its preliminary analysis as to why, following the guidance of *PN2020-04*, claims 1 to 24 on file and the first proposed claim set are prohibited under subsection 27(8) of the *Patent Act* and define subject matter that falls outside the definition of "invention" in section 2 of the *Patent Act*. We also provided our preliminary analysis explaining why claims 1 and 10 on file are indefinite. We offered the Applicant the opportunities to be heard and to make further written submissions.
- [20] In a response dated March 25, 2021, the Applicant declined the offer to attend an oral hearing.
- [21] In a letter received on April 13, 2021 ("R-SPR"), the Applicant provided its response to the Panel's supplemental review of the application, providing revised arguments as to why the application is allowable, in light of *Choueifaty* and the relevant caselaw. The Applicant also included a new set of proposed claims 1-48 (the "second proposed claim set"), comprising method claims 1-24 (identical to the first proposed claim set) and new apparatus claims 25-48.

ISSUES

- [22] There are two issues to be addressed in this review:
- Whether the claims on file define patentable subject matter; and
 - Whether claims 1 and 10 lack clarity and are indefinite.
- [23] As stated earlier, the Court directed the Commissioner to reconsider the claims on file and the proposed claims before the Court, dated November 21, 2019 (i.e., the first proposed claim set). However, as noted above, the second proposed claim set encompasses the same proposed claims 1-24 as those before the Court along with further proposed claims 25-48. Accordingly, we will first consider the claims on file and will then consider the second

proposed claim set, consistent with the Court's direction.

LEGAL PRINCIPLES AND OFFICE PRACTICE

Purposive construction

[24] In accordance with *Free World Trust v Électro Santé Inc*, 2000 SCC 66 [*FreeWorldTrust*] and *Whirlpool Corp v Camco Inc*, 2000 SCC 67, purposive construction is performed from the point of view of the person skilled in the art in light of the relevant common general knowledge (CGK), considering the whole of the disclosure including the specification and drawings. In addition to interpreting the meaning of the terms of a claim, purposive construction distinguishes the essential elements of the claim from the non-essential elements. Whether or not an element is essential depends on the intent expressed in or inferred from the claim, and on whether it would have been obvious to the skilled person that a variant has a material effect upon the way the invention works.

[25] *PN2020-04* also discusses the application of these principles, pointing out that all elements set out in a claim are presumed essential unless it is established otherwise or such presumption is contrary to the claim language.

Patentable subject matter

[26] 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.

[27] Subsection 27(8) of the *Patent Act* prescribes that:

No patent shall be granted for any mere scientific principle or abstract theorem.

[28] *PN2020-04* describes the Patent Office's approach to determining if a claim is patentable subject matter:

To be both patentable subject-matter and not be prohibited under subsection 27(8) of the *Patent Act*, the subject-matter defined by a claim must be limited to or narrower than an actual invention that either has physical existence or manifests a discernible physical effect or change and that relates to the manual or productive arts, meaning those arts involving or

concerned with applied and industrial sciences as distinguished in particular from the fine arts or works of art that are inventive only in an artistic or aesthetic sense.

- [29] *PN2020-04* further describes the Office's approach to determining if a computer-related invention is patentable subject matter. For example, the mere fact that a computer is among the essential elements of the claimed invention does not necessarily mean that the claimed invention is patentable subject matter. An algorithm itself is abstract and unpatentable subject matter. A computer programmed to merely process the algorithm in a well-known manner without solving any problem in the functioning of the computer will not make it patentable subject matter because the computer and the algorithm do not form part of a single actual invention that solves a problem related to the manual or productive arts. On the other hand, if processing the algorithm improves the functionality of the computer, then the computer and the algorithm would together form a single actual invention that solves a problem related to the manual or productive arts and the subject matter defined by the claim would be patentable.

Indefiniteness

- [30] 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.

- [31] In *Minerals Separation North American Corp v Noranda Mines Ltd*, [1947] Ex CR 306, 12 CPR 99 at 146, the Court emphasized both the obligation of an inventor 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

The person skilled in the art

- [32] Based on the application and on statements in the FA, the SPR letter provided the following characterization of the person skilled in the art:

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).

- [33] In the R-SPR letter, the Applicant did not dispute the above characterization, but argued it was incomplete, noting that the skilled person would also know "... how to program or otherwise configure a computer to carry out a series of steps." Given the field of the invention and the skilled person's knowledge of general purpose computing programs, we agree with this clarification and include it in the characterization of the skilled person above.

The relevant common general knowledge

- [34] In our SPR letter, the relevant CGK of the skilled person (or "POSITA") was set out, based on the background section of the application and the characterization in the FA:

The FA (page 2) identified the CGK of the POSITA as:

- knowledge of general computing platforms and associated financial databases and spreadsheet software;
- knowledge of credit facilities and commercial loans (page 2 of the present application);
- 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, 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 (paragraphs 0003 to 0011).

- [35] Similar to its submission regarding the skilled person, in its R-SPR letter the Applicant submitted that the CGK of the skilled person would also include "...the basic working knowledge of how to program or otherwise configure a computer to carry out a series of steps." We agree this is reasonable, as it would be implicit for the skilled person defined

above to also have knowledge in general computer programming. Therefore, we include the Applicant's additional characterization as part of the skilled person's relevant CGK.

The claims on file

[36] There are 24 claims on file comprising independent method claims 1 and 10. We consider claim 1 as representative of the claimed invention:

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.

[37] Independent claim 10 is similar to claim 1, with slight differences in the type of financial information that is tabulated in the database, and with the final two steps in claim 1 replaced by the following:

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

...

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.

[38] Dependent claims 2-9 and 11-24 directly or indirectly depend on claims 1 and 10, respectively, and set forth the following additional features:

- steps related to the operation of a Special Purpose Entity (SPE) investment vehicle for the purchase, transfer, and administration of the loan portfolio created in claims 1 and 10 (claims 2, 3, and 15-18);
- rules and calculations to determine how the loans are selected (claims 4 to 9 and 19 to 24); and
- defining various financial information for recovery, workout and liquidation parameters used in the method of claim 10 (claims 11-14).

[39] As we presented in the SPR letter, the Panel notes that there have been no issues raised during the prosecution of the application in regard to the meaning or scope of any of the terms used in the claims, and we consider that all terms would be readily understood by the skilled person. Additionally, we note that the skilled person would understand that there is no use of language in any of the claims indicating that any of the elements in each claim are optional, a preferred embodiment or one of a list of alternatives. As stated in our SPR letter, following the guidance of *PN2020-04*, in our view, the skilled person would appreciate that all the elements of the claims on file are intended to be essential, including the computer-related components.

[40] In its R-SPR letter, the Applicant did not disagree with the above claim construction, stating (at page 4): "... there is no dispute in the present appeal on claim construction". However, the Applicant suggested that our finding that the meaning and scope of the claim terms was well understood by the skilled person "...undercuts the later finding in the SPR that the impugned claims are indefinite." On this last point, we respectfully disagree. As we stated in the SPR letter, the meaning and scope of all terms defined in the claims on file are considered to be understood by the skilled person. However, clarity in the individual terms used in a claim is not determinative of the clarity of the claim as a whole. We address such lack of clarity regarding claims 1 and 10 on file later in this review.

Patentable subject matter

[41] In the SPR letter (at pages 8-9), we set out why the skilled person would understand that the subject matter of claim 1 pertains to the financial and loan related parameters and rules for selecting a loan portfolio, using a computer operating commonly available software:

Claim 1 is directed to a method for assembling a commercial loan portfolio with at least 30% of distressed commercial loans and establishing a purchase price for each loan in the portfolio. Claim 1 defines the use of at least one computer to perform the steps of selecting the loans, tabulating various financial information in a database, calculating cash flows and prices for the loans, and displaying the price data on a screen or in print. These steps relate to computerized data input, data processing, and data output steps. The POSITA would understand from the specification that these functions utilize a generic computer and are carried out in a conventional manner. As disclosed in para [0044], the database models may be implemented with “various commonly available software platforms”. At para [0058], the implementation of the computerized method is left to the skilled person:

Of course, any suitable spreadsheet or accounting, financial, or database software (e.g., Microsoft Excel, Microsoft Access, etc.) may be used to facilitate the input of the data and to perform these calculations more simply or even automatically, as will be readily appreciated by those of ordinary skill in the art.

The remainder of the disclosure describes numerous financial criteria to be stored in various fields of the database using, for example, templates or spreadsheet entries. No further computer-related details are disclosed; the POSITA, having read the complete specification, would find no explicit nor reasonably inferred disclosure of any improvements to the functioning of the generic computer in claim 1, nor any instructions or guidance for implementing the method on said computer. Instead the focus of the application is on the financial and loan related parameters and rules used in the method of claim 1.

[42] From this, following the guidance in *PN2020-04*, we determined that the computer is operating in a well-known manner to calculate or process the rules and financial information needed to select the loans and that there is no improvement in the functioning of the computer. We further expressed our preliminary view that the skilled person would regard the actual invention in the claim as being the abstract rules and financial data (SPR at page 9, referencing, in part, *Canada (Attorney General) v Amazon.com, Inc*, 2011 FCA 328 [*Amazon*]):

According to *PN2020-04*, “[i]f a computer is merely used in a well-known manner, the use of the computer will not be sufficient to render the disembodied idea, scientific principle or abstract theorem patentable subject-matter and outside the prohibition under subsection 27(8) of the *Patent Act*.” As discussed in *Amazon*, using a computer to implement an abstract method will not necessarily provide the physicality that is implicitly required in the definition of invention in section 2 of the *Patent Act*.

In our preliminary view, this is the situation defined in independent claim 1. The actual invention is the specific loan selection criteria and tabulated financial information used to price the commercial loans and create the portfolio. Although implemented on a computer, the computer is merely used in a well-known manner to make the kind of calculations and generic data processing operations the computer was invented to make and therefore does not form part of a single actual invention with the rest of the claim.

Accordingly, the method to create a loan portfolio using certain financial information as defined in claim 1 is abstract and not something having physical existence itself or something that manifests a discernible effect or change. Thus, in our preliminary view, the actual invention of claim 1 is prohibited under subsection 27(8) of the *Patent Act* and the subject-matter of the claim is not patentable subject-matter falling within the definition of “invention” in section 2 of the *Patent Act*.

[43] In the R-SPR (pages 5-11), the Applicant disagreed with the Office’s actual invention approach, and submitted arguments against the Panel’s preliminary determination of non-patentable subject matter in claim 1. The Applicant characterized its objections under three main headings, which we will address separately:

1. The claimed functions are not carried out in a conventional manner;
2. Carrying out the claimed methods on a generic computer is irrelevant to section 2;
and
3. The claimed method does not use a computer to implement an abstract method.

1. The claimed functions are not carried out in a conventional manner

[44] In the R-SPR at page 5, the Applicant objects to our statement in the SPR at page 8 (see above) that “... these functions utilize a generic computer and are carried out in a conventional manner”. The Applicant contends “conventional” suggests the combination of steps in the method was assessed as either known or obvious, despite no prior art objections having been raised by the Panel.

[45] We agree that there is no issue before us regarding anticipated or obvious subject matter, nor was the SPR written to imply that a new objection regarding prior art was now applicable. We concede that the word “conventional” might be misunderstood as an allegation of known or obvious method steps; this was not our intent.

[46] Rather, the word “conventional” was used to convey that the computer is operating in a well-known manner with respect to accepting input, processing and producing output. It was not used in reference to the loan selection, rebalancing or securitization steps of the claimed methods which are carried out by the computer, or to the financial criteria (data) that is tabulated by the computer, which together are the focus of the description. The description (para 58, cited above) only briefly mentions the use of common spreadsheet software running on what a skilled person would surmise to be a general-purpose computer. At para 54, the description indicates that [emphasis added]: “It is preferable to process financial data using computer programming, due to the many variables involved.”

To the skilled person, the brief mention of any computer-related components and the use of commercial spreadsheet software reinforces the generic nature of the computer elements, and the secondary role they play in the invention. The computer-implemented method is not associated with, for example, a corresponding change or improvement in how the computer functions, or with any external hardware or steps that would suggest to the skilled person that there is anything more than using a generic computer to process data in a well-known manner.

- [47] Therefore, the Panel considers that the disclosed computer is operating in a well-known manner to perform conventional data input, processing, and output functions. No other improved computer functionality is disclosed. According to *PN2020-04*, this is a significant factor in the determination of patentable subject matter, as seen next.

2. Carrying out the claimed methods on a generic computer is irrelevant to section 2

- [48] At pages 6-9 of the R-SPR, the Applicant argues that the presence of a “generic” computer is irrelevant to the determination of patentable subject matter and states that “...the fact that the claimed methods can be carried out on a generic computer does not render the claimed methods non-statutory”.
- [49] We agree that the mere presence of a generic computer does not necessarily render claimed subject matter unpatentable under section 2, just as the mere presence of a computer does not necessarily determine a claim to be patentable. In accordance with *PN2020-04*, what is important to be determined is whether a) running the algorithm on that generic computer improves the functioning of the computer, such that the two entities form a single actual invention having a physical existence or manifesting a discernible effect or change, or instead, b) the computer is merely operating in a well-known manner to process the algorithm or rules (i.e., receiving data input, calculating or processing data, and providing output data).
- [50] Thus, in the Panel’s view, the presence in a claim of a generic computer is a relevant consideration. This is supported by caselaw in the computer-related arts. In *Schlumberger v Canada (Commissioner of Patents)*, [1982] 1 FC 845 (FCA) [*Schlumberger*], the presence of a computer was not determinative of the issue of patentable subject matter. The Court in *Amazon* at para 69 noted that “[t]he 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.”

- [51] Following *PN2020-04*, after a purposive construction of the claims finding the generic computer to be essential in claim 1, it is necessary for the Panel to then consider the role of the computer and the actual invention in its determination of patentable subject matter.
- [52] In further support of its contention a generic computer is not relevant, the Applicant makes reference to the original application in *Amazon*, “Method and System For Placing a Purchase Order Via a Communication Network”, now Canadian Patent 2,246,933 (the ’933 patent). The Applicant contends that because the allowed claims in the ’933 patent utilize generic computers programed to carry out their intended purposes, the Office should not refuse a patent application for lack of patentable subject matter simply because the claims involve the use of a generic computer.
- [53] We note that every application before the Board is reviewed on its own merits, considering the facts of the particular case, the relevant caselaw, and the submissions by an Applicant to the assigned panel at that time. Previous reviews or allowances are not determinative of the current application under review. This Panel makes no determination as to the similarity of the allowed claims in the ’933 patent with those of the present application, or to the compliance of the allowed claims in the ’933 patent with *PN2020-04*.
- [54] For the reasons above, the Panel does not agree that the assessment of whether or not the claimed computer is “generic”, as in *PN2020-04*, is irrelevant. In both *Schlumberger* and *Amazon*, the mere presence of a computer in a claim is not taken as determinative of the question of patentable subject matter. According to *PN2020-04*, one must determine whether or not the computer and the algorithm in claim 1 form a single actual invention. In our view, the computer in claim 1 merely operates in a well-known manner (e.g., performs calculations, displays and stores data, etc.), and the algorithm does not improve the functioning of the computer.

3. The claimed method does not use a computer to implement an abstract method

- [55] At pages 9-11 of the R-SPR, the Applicant contends that reference by the Panel to the actual invention illustrates a “misguided approach” to assess “what CIPO believes has been invented” rather than assessing the subject matter of purposively construed claims, further stating the approach has been repudiated by the Court in *Choueifaty*. The Applicant then argues that since the claim is directed to a “computerized method” and identifies “at least one computer”, and “display”, claim 1 is clearly patentable subject matter, and not merely the computerization of an abstract method.

- [56] We note that the Court in *Choueifaty* commented (at para 37) that the use by the Office of a problem-solution approach to claim construction was akin to using the “substance of invention”, discredited by the Supreme Court in *FreeWorldTrust*. At the time, *PN2020-04* did not exist, and as such the Court has not expressed any views on it. The Panel also notes that its determination of subject matter is not based on what we believe has been invented, but rather follows from a purposive construction of the claims, per the guidance in *PN2020-04*, which states “[f]or each claim, the identification of the actual invention must be grounded in a purposive construction of the claim...” (citing *Amazon* para 43).
- [57] Regarding the substantive argument, that by defining various computer elements, claim 1 is therefore directed to patentable subject matter, we have already addressed why the mere presence of computer components or computer-implemented steps in a claim is not determinative, under sub-heading 1, above, with reference to *PN2020-04*, *Amazon*, and *Schlumberger*. The Applicant’s proposed approach, whereby the physicality of the claimed computer would automatically confer patentability to the subject matter of the claim, would be inconsistent with at least *Amazon*, for example, at para 61.
- [58] Finally, the contention that claim 1 defines something more than a computerization of an abstract method, achieving a result not previously achievable through a series of mental steps (R-SPR, bottom page 10) is not, in the Panel’s opinion, supported by the application as read by the skilled person.
- [59] We note that the skilled person would not consider the application to be directed to any computerization or automation of an otherwise known manual method. Rather, the application discloses new loan selection and securitization methods and the various financial criteria associated with those methods. The extent of “computerization” discussed in the description is a brief mention that the method may be run on a commercially available spreadsheet, which we agree with the Applicant would be fully within the CGK of the skilled person. In our view, the skilled person would understand that the computer is used in place of performing the loan selection steps on paper or mentally.
- [60] Furthermore, the skilled person would recognize that the only benefit or difference that may result from the use of the computer in claim 1 would be the well-known advantages of any computer performing any calculations; namely, the ability to handle many variables, storage and easy retrieval, repetitive manipulation and faster, more accurate outputs. These are advantages of any generic computer operating in a well-known manner, and are the

reasons precisely why computers are used. Similar to the computer in *Schlumberger*, the computer could be excluded and the rules and financial criteria could still be followed to extract the desired loan portfolio.

Conclusions regarding subject matter

- [61] Having considered all of the Applicant's submissions in its R-SPR, and following the guidance of *PN2020-04*, we are of the opinion that claim 1 pertains to a generic computer operating in a well-known manner, running a method for selecting loans for a portfolio. The computer and the loan selection steps together do not form a single actual invention; rather, the actual invention is the algorithm for calculating a loan portfolio according to certain rules and data. An algorithm by itself is abstract and prohibited subject matter under subsection 27(8) of the *Patent Act*. Furthermore, an algorithm for calculating a loan portfolio according to certain rules is not something with physical existence, or something that manifests a discernable effect or change, and thus claim 1 defines unpatentable subject matter and is not compliant with section 2 of the *Patent Act*.
- [62] Claim 10 defines a method to create a capital structure to securitize a loan portfolio by selecting at least 30% distressed loans, tabulating certain financial parameters, emulating cash flows and recovery characteristics of performing loans, and displaying the resulting portfolio. Given the similar essential elements defined in independent claim 10 as in claim 1, including the same generic computer used in a well-known manner to process an algorithm, we consider the same reasoning to apply. In the same manner as claim 1, the algorithm for calculating a capital structure and securitized loan portfolio in claim 10 is prohibited under subsection 27(8) of the *Patent Act*, and the subject matter of the claim is not patentable subject matter falling within the definition of "invention" in section 2 of the *Patent Act*.
- [63] Dependent claims 2, 3, and 15-18 pertain to the SPE and its administering the loan portfolio created in claims 1 and 10, respectively. Issuing securities, collecting and making payments, determining pricing, and sending information to credit agencies are all steps defining abstract financial information that do not have physical existence or manifest a discernible effect or change. In our view, the actual inventions of these claims are the abstract algorithms and calculations, which are prohibited by subsection 27(8) of the *Patent Act* and are not patentable subject matter falling within the definition of section 2 of the *Patent Act*.

- [64] Claims 4-9, 11-14, and 19-24 define further financial criteria for processing the loan portfolios of claim 1 and 10. Abstract financial information does not define anything with physical existence or that manifests a discernible effect or change. In our view, the actual inventions of these claims are abstract algorithms, calculations and data, which are prohibited by subsection 27(8) of the *Patent Act* and are not patentable subject matter falling within the definition of section 2 of the *Patent Act*.
- [65] Therefore, our view is that claims 1 to 24 on file are prohibited under subsection 27(8) of the *Patent Act* and define subject matter that falls outside the definition of “invention” in section 2 of the *Patent Act*.

Indefiniteness

- [66] As discussed under *Prosecution History*, above, the PR letter identified an issue of indefiniteness in claims 1 and 10, regarding uncertainty in how the defined database interacts with the steps of determining anticipated cash flows and establishing a purchase price for each commercial loan. In the R-PR, the Applicant did not disagree and submitted proposed claims to overcome the defect.
- [67] Our preliminary view expressed in the SPR letter was in agreement with the assessment in the PR letter that there is uncertainty as to the scope of the subject matter in claims 1 and 10. Claims 1 and 10 each recite a step of creating a data base comprising tabulated financial information for each of the selected commercial loans. However, there is no indication that this tabulated information is used in the steps of determining anticipated cash flows and establishing a purchase price for each commercial loan and in our view, this would not be implicit to the skilled person. The lack of interactions between the claimed method steps creates uncertainty as to the scope of the claimed subject matter.
- [68] The Applicant did not dispute or comment on our preliminary view on indefiniteness except for its assertion that we undercut that position by acknowledging that the meaning of the terms used in the claims would be clear to the skilled person. As we have already stated above, our view is that the clarity of the individual terms used in a claim is not determinative of the clarity of the claim as a whole. Apart from that assertion, the Applicant proposed amendments that we had already acknowledged would address our concern.

[69] Therefore, our view is that claims 1 and 10 on file are indefinite and do not comply with subsection 27(4) of the *Patent Act*

Proposed Claims

[70] As stated in the *Prosecution History*, above, we will consider the second proposed claim set, as submitted with the Applicant's R-SPR letter. The second proposed claim set comprises claims 1-24 which correspond directly by number with the claims on file (and that correspond to the proposed claims before the Court), and newly proposed claims 25-48, which define apparatus embodiments for each of proposed claims 1-24, respectively.

[71] We consider independent claim 1 as representative of the proposed claims. The differences from independent claim 1 on file are underlined, and as we explained earlier, were added by the Applicant to address the lack of clarity defect identified in the PR letter:

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

...

determining, from the tabulated information stored in fields of the data base, anticipated cash flows from each commercial loan in the selected plurality of commercial loans; and

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. [emphasis added]

[72] Independent proposed claim 10 incorporates the same additional wording as used in claim 1 above, for a method of creating a capital structure to securitize a loan. Claims 25 and 34 correspond directly with claims 1 and 10, but define an apparatus for achieving the method steps. The dependent proposed claims 2-9 and 26-33 correspond to claims 2-9 on file, while dependent proposed claims 11-24 and 35-48 correspond to claims 11-24 on file.

[73] Considering that proposed claims 1-48 pertain to the same field and subject matter as the claims on file, we consider that the characterizations of the skilled person and the CGK remain the same as our analysis above. Furthermore, we consider that the skilled person would understand there is no use of language indicating that any of the steps in any of the proposed claims are optional, a preferred embodiment or one of a list of alternatives. Therefore, in our view, all of the elements in the proposed claims are considered essential.

[74] Regarding the issue of patentable subject matter, the additional wording of proposed independent claims 1, 10, 25 and 34 does not alter the abstract nature of the calculations

and financial information used to assemble a loan portfolio or to select and securitize a loan portfolio, running on a generic computer in a well-known manner. The computer defined in the proposed claims, as in the claims on file, is simply used in a well-known manner, employing generic input, processing and output steps, with no apparent improvement to the functioning of the computer. The computer therefore does not form a single actual invention with the abstract algorithms to select or securitize a loan portfolio.

- [75] In our view, the abstract algorithms, calculations and data of the proposed claims are also prohibited under subsection 27(8) of the *Patent Act* and the claims define non-patentable subject matter that falls outside the definition of “invention” in section 2 of the *Patent Act*.
- [76] Regarding the issue of indefiniteness, given that the proposed claims 1, 10, 25, and 34 explicitly define the relationship between the information tabulated in the database and the steps used to establish the loan portfolio, it is our view that the second proposed claim set overcomes the indefiniteness of the claims on file and thus complies with subsection 27(4) of the *Patent Act*.
- [77] To summarize our analysis of proposed claims 1-48, while the claims are considered to overcome the indefiniteness defect, they nevertheless do not overcome the non-patentable subject matter defect, and therefore would not overcome the defects in the claims on file as a whole.

CONCLUSION

- [78] In light of the above, we conclude that the claims on file define subject matter that is prohibited under subsection 27(8) of the *Patent Act* and that falls outside the definition of “invention” in section 2 of the *Patent Act*. Claims 1 and 10 on file are also indefinite and therefore not compliant with subsection 27(4) of the *Patent Act*.
- [79] Furthermore, proposed claims 1-48 are not directed to patentable subject matter, and therefore these amendments are not considered “necessary” for compliance with the *Patent Act* and *Patent Rules* as required by subsection 86(11) of the *Patent Rules*.

RECOMMENDATION OF THE BOARD

- [80] For the reasons above, we recommend that the application be refused on the basis that:

- the subject matter of the claims on file is prohibited under subsection 27(8) of the

Patent Act and is not patentable subject matter as it falls outside the definition of “invention” in section 2 of the *Patent Act*; and

- claims 1 and 10 on file are indefinite and therefore not compliant with subsection 27(4) of the *Patent Act*.

Andrew Strong

Stephen MacNeil

Cara Weir

Member

Member

Member

DECISION OF THE COMMISSIONER

[81] I concur with the findings of the Board and its recommendation to refuse the application on the basis that:

- the subject matter of the claims on file is prohibited under subsection 27(8) of the *Patent Act* and is not patentable subject matter as it falls outside the definition of “invention” in section 2 of the *Patent Act*; and
- claims 1 and 10 on file are indefinite and therefore not compliant with subsection 27(4) of the *Patent Act*.

[82] Accordingly, 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.

Virginie Ethier

Assistant Commissioner of Patents

Dated at Gatineau, Quebec

this 30th, day of June, 2021