

Citation: Edward Jones & Co. (Re), 2025 CACP 7

Commissioner's Decision #1688

Décision du commissaire n° 1688

Date: 2025-05-26

TOPIC: B22 Claims—Excessive Width—Not Supported by Disclosure
C00 Disclosure—Adequacy or Deficiency of Description
J00 Subject Matter of Applications—Meaning of Art

SUJET : B22 Revendications—Portée excessive—Non appuyée par la divulgation
C00 Divulgation—Caractère adéquat ou inadéquat de la description
J00 Objet des demandes—Signification de la technique

Application No. 2800066

Demande n° 2 800 066

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

The Commissioner refuses patent application number 2800066 based on the Patent Appeal Board's recommendation. The Board reviewed the application under paragraph 199(3)(c) of the *Patent Rules*, SOR/2019-251, following the application's rejection under subsection 30(3) of the former *Patent Rules*, SOR/96-423.

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INTRODUCTION

- [1] This recommendation concerns the review of rejected patent application number 2800066 which is entitled “System and Method For Income Managed Account” and is owned by Edward Jones & Co. The outstanding defects indicated by the Final Action are that the claims are directed to unpatentable subject-matter, some claims lack support in the description, and there is a defect in the description of the drawings.
- [2] The Patent Appeal Board reviewed the rejected application pursuant to paragraph 199(3)(c) of the *Patent Rules*, SOR/2019-251 (herein referred to as the *Patent Rules* corresponding to this version, unless otherwise noted). As explained below, I recommend that the Commissioner of Patents refuse the application.

BACKGROUND

The application

- [3] Canadian patent application 2800066 has a filing date of December 28, 2012, and has been open to public inspection since June 29, 2013.
- [4] The application generally relates to managing consolidated accounts and, more specifically, to the monitoring, managing and consolidation of income and investments from several sources and the controlled distribution of assets from consolidated accounts.

Prosecution history

- [5] The Examiner issued a Final Action, dated October 7, 2019, rejecting the application pursuant to subsection 30(3) of the former *Patent Rules*, SOR/96-423. The Final Action indicated the application to be defective on the grounds that the claims are directed to unpatentable subject-matter, some claims lack support in the description, and there is a defect in the description of the drawings.

- [6] The Applicant submitted a Response to the Final Action, dated January 6, 2020, that proposed an amended description and argued for allowance of the application.
- [7] The Examiner was unpersuaded by the Applicant's arguments and did not consider the proposed amendment to remedy all the defects identified in the Final Action, as indicated in the Summary of Reasons, sent to the Applicant in a letter February 19, 2020. The application was referred to the Patent Appeal Board for review of the issues on behalf of the Commissioner of Patents.
- [8] The undersigned was tasked to review the rejected application pursuant to paragraph 199(3)(c) of the *Patent Rules*.
- [9] A Preliminary Review letter, dated November 14, 2024, was sent to the Applicant, concluding that the claims are directed to unpatentable subject-matter and that the description of the drawings is defective but which would be corrected by the proposed description. The Preliminary Review letter also concluded that the claims were fully supported by the description.
- [10] The Applicant submitted a Response to the Preliminary Review letter on January 15, 2025, that argued the claims are directed to patentable subject-matter. This Response also proposed claim amendments.
- [11] An in-person hearing was held January 23, 2025. The Applicant expanded on the arguments made in their Response to the Preliminary Review letter.
- [12] I have completed my review of the instant application and provide below my analysis of the issues regarding the rejected application and my recommendation that the Commissioner of Patents refuse the application.

ISSUES

- [13] This review considers the issue of whether claims 1 to 19 (the claims on file at the time of the Final Action; these claims are dated July 3, 2018) are directed to patentable subject-matter. Specifically, do the claims on file encompass subject-

matter that lies outside the definition of “invention” and does not comply with section 2 of the *Patent Act*, RSC 1985, c P-4 (herein referred to as the *Patent Act*)? And do the claims on file comply with subsection 27(8) of the *Patent Act*?

- [14] This review also considers whether claims 1, 14, and 17 on file are not fully supported by the original description and do not comply with section 60 of the *Patent Rules*.
- [15] Finally, this review considers whether the description of the drawings does not comply with subsection 59(11) of the *Patent Rules*.
- [16] After considering the claims on file of the instant application, I review the Applicant’s proposed amendments, specifically the amended description submitted January 6, 2020 and the proposed claims submitted January 15, 2025, to determine if they would be considered necessary amendments under subsection 86(11) of the *Patent Rules*.

PURPOSE CONSTRUCTION

Principles

- [17] Purposive construction is antecedent to any consideration of validity (*Free World Trust v Électro Santé Inc*, 2000 SCC 66 [*Free World Trust*] at para 19; *Whirlpool Corp v Camco Inc*, 2000 SCC 67 [*Whirlpool*] at para 43). Purposive construction is performed from the point of view of the person skilled in the art (or the skilled person) in light of the relevant common general knowledge, considering the whole of the disclosure including the specification and drawings (*Free World Trust* at paras 31, 44, 51–52, 55–60; *Whirlpool* at paras 45–49, 52–53; [“Patentable Subject-Matter under the Patent Act”](#) (CIPO, November 2020) at “Purposive construction” [PN2020–04]).
- [18] 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 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.

- [19] *PN2020–04* (at “Purposive Construction”) summarizes purposive construction by noting that all elements in a claim are presumed essential unless it is established otherwise, or unless such presumption is contrary to the claim language.

Analysis: The skilled person and the common general knowledge

- [20] Since purposive construction is performed from the point of view of the skilled person in light of their common general knowledge, I must first characterise both ([*Manual of Patent Office Practice*](#) (CIPO) at §12.02.01, revised June 2015 [MOPOP]).

- [21] The Final Action (page 2) characterised the skilled person or team as:

... the skilled person, who may be a team of people, is skilled in the field of investment portfolio management which includes monitoring income streams and expense needs, managing the cash flows of the account, tracing and predicting the account balance, and determining the distribution of asset[s]. The skilled person in the art (or team of people) would also be skilled in the area of computing devices (software and hardware) with network connections, and GUI[s] (graphical user interface[s]) for executing computer programs.

- [22] In the Response to the Final Action (page 3), the Applicant disagreed with the characterisation of the skilled person:

It is respectfully submitted that the above characterization of the person of ordinary skill in the art is improper, at least inasmuch as the Examiner identifies such persons by reference to what appears to be an implicit assertion of the relevant common general knowledge. As indicated above, the identification of the relevant common general knowledge is performed in item 2, only once the person of ordinary skill in the art has been identified

in item 1. Conflating the two requirements in the manner done by the Examiner bears the risk of improperly insinuating into the assessed common general knowledge teachings available only from the Applicant's own disclosure, by characterizing as the person of ordinary skill in the art as being such a person as would have possessed knowledge of that teaching, commonly and generally with other like persons.

- [23] I agreed with the Applicant in the Preliminary Review letter (page 5) that it is improper to characterise the skilled person solely in terms of their common general knowledge.
- [24] The Preliminary Review letter (page 5) also set out my preliminary view that the skilled person is identified as a team comprising one or more professionals in the financial planning and risk management industry experienced in the area of investment portfolio management. The team also includes programmers or other technologists experienced with developing and providing the software, tools and infrastructure conventionally used to support such professionals.
- [25] The Applicant did not dispute this characterisation in their Response to the Preliminary Review letter. The Applicant also confirmed this position at the hearing. Therefore, I adopt this characterisation of the skilled person for this review.
- [26] The Final Action (page 2) characterised the common general knowledge as including:

In view of the statements in the original description (paragraphs 0001-0005) the common general knowledge of the person skilled in the art includes knowledge in the following areas:

- Account and investment portfolio management
- Asset allocation to different accounts
- Management of cash balances and cash flow
- Identification of priority order of assets for liquidations
- Projection of balances of consolidated accounts

It is further to be noted that the applicant has acknowledged that the computer devices used in the embodiment of the present invention are general computer devices and well known connections of networks, which represents standard technology that is part of the common general knowledge of the person skilled in the art (original description, paragraphs 0025, 0030-0041).

[27] In the Response to the Final Action (pages 3–4), the Applicant submitted that the generalisation of the common general knowledge as including the “projection of balances of consolidated accounts” was not supported by the evidence on record and should not be considered common general knowledge. As is evident from my analysis below, this contested point of common general knowledge was neither adopted nor applied.

[28] The Preliminary Review letter (page 6) set out my preliminary view of the common general knowledge as including:

- knowledge of account and investment portfolio management;
- knowledge of asset allocation to different accounts;
- knowledge of management of cash balances and cash flow;
- knowledge of consolidated account management and their related shortfalls;
- general-purpose computers, computing devices, processors, input and output devices, network interfaces and user interfaces;
- computer hardware and computer programming techniques;
- the use of databases and database management systems; and
- the use of such computers and computer devices in the investment portfolio management industry for facilitating and automating portfolio management services.

[29] As explained in the Preliminary Review letter (page 7), these elements are based on the characterisation of the skilled person. The first four points are supported by the instant application’s description of what is typical in the field (para 0002). The last four elements are supported by the instant application’s description regarding the computer embodiment of the claimed invention for managing a

consolidated account (paras 0030–0039). The level of detail in the description suggests that such computer embodiments are within the grasp of the skilled person.

- [30] Similar to their response regarding the skilled person, the Applicant also did not dispute the characterisation of the common general knowledge in their Response to the Preliminary Review letter. The Applicant also confirmed this position at the hearing. Therefore, I adopt this characterisation of the common general knowledge for this review.

Analysis: Essential elements

- [31] There are 19 claims on file.
- [32] Independent claim 1 on file is directed to a method of managing a consolidated account by ranking potential transactions that optimize predictions of the consolidated account balance against a predetermined criteria. Independent claim 14 on file is directed to a method of managing a consolidated account and liquidating assets to optimize the predicted balance of the consolidated account balance against a predetermined criteria. Independent claim 17 on file is directed to a computer system embodying method claim 14.
- [33] Independent method claim 1 on file is illustrative of the claimed invention:
1. A method of managing a consolidated account, comprising the steps of:
 - (a) providing a first account of non-cash assets;
 - (b) providing a second account of non-cash assets, the second account being different than the first account;
 - (c) using a processor, predicting the account balance of the consolidated account associated with a plurality of accounts, including the first and second account as a function of time and balance amount, including the steps of:

- (i) predicting the amount and timing of income to be earned from the assets of the first account to be deposited into the consolidated account;
 - (ii) predicting the amount and timing of income to be earned from the assets of the second account to be deposited into the consolidated account; and
 - (iii) predicting the amount and timing of withdrawals from the consolidated account;
- (d) using a processor, comparing the predicted balance of the consolidated account with a predetermined criteria, and if the predicted account balance is less than the predetermined criteria:
- (i) identifying the time at which the predicted account balance of the consolidated account is less than the predetermined criteria;
 - (ii) identifying a list of potential transactions for the plurality of accounts in which to liquidate assets to thereby increase the predicted balance of the consolidated account to satisfy the predetermined criteria within a selectable window of time before the identified time at which the predicted account balance of the consolidated account is less than the predetermined criteria;
 - (iii) for each potential transaction, performing step (c) above and comparing the predicted balance of the consolidated account with the predetermined criteria and discarding a potential transaction if the predicted account balance is less than the predetermined criteria;
 - (iv) for the potential transactions that have not been discarded, ranking the list of potential transactions for the plurality of accounts in a priority order.

[34] Dependent claims 2 to 13, 15 to 16, and 18 to 19 on file embody further limitations on the independent claims describing additional means to manage a consolidated account, such as liquidating assets in the priority order, displaying

the consolidated account balance, performing the method steps periodically, monthly, or when deposits are made, and the types of income to be deposited into the consolidated account. The dependent claims also embody further refinements regarding the predetermined criteria, the prioritization of the list of accounts, prediction periods, and the timing of deposits.

- [35] As a preliminary matter, I note that the Examiner construed the claims on file in the Final Action according to a previous Office Practice that is now superseded by *PN2020-04*. The Preliminary Review letter provided the Applicant with my *de novo* construction of the claims according to the “Principles” outlined above.
- [36] Purposive construction is performed from the point of view of the skilled person in light of their common general knowledge and includes interpreting the meaning of the terms of a claim. The claims under review do not appear to include any terms that would be unfamiliar to the skilled person in light of their common general knowledge. My view as expressed in the Preliminary Review letter was that the skilled person would readily understand the claim language, the scope of the claims and their meaning.
- [37] Next, as further described above under the heading “Principles”, purposive construction identifies the essentiality of the claim elements. As stated in the Preliminary Review letter, it was my view that the skilled person would understand there is no use of language indicating that any of the elements are optional, and therefore, following *PN2020-04*, I considered that all the elements of the illustrative claim 1 on file are essential, including the methods steps of managing a consolidated account and the computer-implemented elements embodying the method steps. A similar reasoning also applies to the remaining claims on file.
- [38] The Applicant did not contest or otherwise comment on the claim construction as presented in the Preliminary Review letter. This review proceeds on this understanding of the claims’ construction.

PATENTABLE SUBJECT-MATTER DEFECT

Principles

[39] Invention is defined 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.

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

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

[41] *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.

[42] The determination of the actual invention is a relevant and necessary question in assessing patentable subject-matter (*Canada (Attorney General) v Amazon.com Inc*, 2011 FCA 328 [*Amazon*] at para 42). As stated by the Federal Court of Appeal in *Canada (Attorney General) v Benjamin Moore & Co*, 2023 FCA 168 [*Benjamin Moore*] at para 68, this determination is in line with that Court’s statement in *Schlumberger Canada Ltd v Commissioner of Patents*, [1982] 1 FC 845 (CA) [*Schlumberger*] that a patentable subject-matter assessment involves determining what according to the application has been discovered. The actual

invention is identified in the context of the new discovery or knowledge and must ultimately satisfy the “physicality requirement” that is implicit in the definition of “invention” (*Amazon* at paras 65 and 66).

- [43] *Amazon* at para 44 tells us that “a patent claim may be expressed in language that is deliberately or inadvertently deceptive” and that what appears on its face to be an “art” or “process” may in fact be a claim to an unpatentable mathematical formula, as was the case in *Schlumberger*.
- [44] This sentiment is expressed in the position of the Federal Court of Appeal in *Amazon* on the physicality requirement. There is a requirement for something with physical existence, or something that manifests a discernible effect or change. Nevertheless, this requirement cannot be met merely by the fact that the claimed invention has a practical application (*Amazon* at paras 66 and 69). To illustrate this point, *Amazon* referred to *Schlumberger*, where the claims “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” (*Amazon* at para 69).
- [45] The patentable subject-matter concerns regarding the well-known use of a computer to process an algorithm, illustrated by *Schlumberger*, are expressed in the factors set out in *PN2020–04* that may be considered when reviewing computer-implemented inventions, namely:
- 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, unpatentable subject-matter and prohibited by subsection 27(8) of the Patent Act;
 - a computer programmed to merely process an abstract algorithm in a well-known manner without more will not make it patentable subject-matter; and

- if processing an algorithm improves the functionality of the computer, then the computer and the algorithm would together form a single actual invention that would be patentable.

[46] The above factors and the general concerns around the well-known use of a computer to process new abstract algorithms can be seen to involve considerations of novelty or ingenuity. Canadian law does not prohibit considerations of the novelty or ingenuity of elements of a claim in considering patentable subject-matter and finds support in situations like that of *Schlumberger* where a known tool, a computer, is used to give an abstract mathematical formula a practical application (*Benjamin Moore* at paras 69–70, referring to *Amazon*). These considerations assist in the determination of the discovery or new knowledge, the method of its application and the actual invention (*Benjamin Moore* at para 89) that is ultimately measured against the physicality requirement.

[47] As noted in *Benjamin Moore* at para 94 (and similarly expressed in *Amazon* at para 61), the physicality requirement will not likely be satisfied without something more than only a well-known instrument, such a computer, being used to implement an abstract method. The factors set out above from *PN2020–04* assist in determining whether something more is present.

Analysis: The claims are not directed to patentable subject-matter

[48] My view is that claims 1 to 19 on file define unpatentable subject-matter.

[49] As a preliminary matter, I note that the Examiner assessed the patentable subject-matter defect in the Final Action according to a previous Office Practice that is now superseded by *PN2020–04*. Therefore, similar to the purposive construction assessment above, I conducted a *de novo* assessment of the claims for patentable subject-matter according to the “Principles” outlined above and presented my preliminary views to the Applicant in the Preliminary Review letter.

- [50] At the heart of this assessment, as described above under the heading “Principles”, is to determine what the inventor has actually invented or claims to have invented (*Amazon* at para 42; *Benjamin Moore* at para 68). This is referred to in *PN2020–04* as determining the “actual invention”, or equivalently, identifying the “discovery” (as in *Schlumberger*), or “determining where the discovery lies” (as in *Benjamin Moore* at para 89). Given that the claims in this case embody a computer-implemented invention, the assessment becomes what role, if any, does the computer have in the actual invention.
- [51] The Applicant’s Response to the Preliminary Review letter (pages 10-15) dives into this question regarding the role of a computer in the actual invention by reviewing Office Practice and the law. The Applicant begins with an assessment of Office Practice principles, highlighting that the actual invention of a claim is a combination of elements that cooperate together that have physical existence or manifests a discernible physical effect or change and relates to the manual or productive arts. The Applicant likens these principles to the Office Practice assessment of claims directed to “mere aggregations” as described in *MOPOP* §18.02.04, namely, claim elements must cooperate together to produce a unitary result that is different from the sum of the results of the elements. According to the Applicant, the question to determine regarding the role of information technology (the totality of the computer-implemented elements) in a claim becomes (page 12):

Where information technology has a novel configuration, in what circumstances does the information technology: a) “function as would be expected if it were used on its own”; or, instead b) “produce a unitary result that is different from the sum of the results of the elements”.

It is respectfully submitted that at least one valid way to approach this question is to ask whether the entirety of that part of the desired result contributed by the use of the information technology does or does not relate exclusively to the known advantages provided by the use of information technology generally.

- [52] The Applicant supported this position by considering *Schlumberger*, where it appeared, at least to the Applicant, that “the Court treated the claimed subject-matter in *Schlumberger* as a ‘mere aggregation’ because the information technology elements and the novel configuration elements did not produce ‘a unitary result that is different from the sum of the results of the elements’” (page 12).
- [53] The Applicant also supported this view by highlighting the example in *PN2020–04* labelled “Computer-implemented Example 2” whereby the Office acknowledges that, in the words of the Applicant, “there is patent-eligible subject-matter when a computer configuration enables improved performance of the function by the computer, at least in the sense of requiring fewer computational resources, or requiring less time to perform the function” (page 13).
- [54] I respectfully disagree with the Applicant’s position that a computer must cooperate together with the claimed method to produce a unitary result that is different from the sum of the results of the elements in order for the claimed subject-matter to be found patentable. In my view, such a position appears to conflate the Office Practice on “aggregations”, described in *MOPOP* §18.02.04 as an obviousness defect wherein each claim element of an aggregation is known in the prior art, with the Office Practice *PN2020–04* to determine patentable subject-matter that assesses the actual invention of a claim. These are separate and distinct enquiries that have different bases in the *Patent Act*.
- [55] I also disagree, respectfully, with the Applicant’s characterization of the *Schlumberger* decision. The decision makes no references to either “aggregations” or “unitary result” in the context of assessing the role of a computer in a computer-implemented invention. Rather, the decision assessed what, according to the application, had been discovered and concluded that a claim to computer implementation of an unpatentable discovery was itself unpatentable.
- [56] The Applicant further noted (page 13) that the improved performance of the functioning of a computer should not be viewed as being limited to fewer

computational resources or requiring less time to perform the function. There may be other situations in which information technology and a novel configuration thereof form a “single actual invention” by assessing “whether the entirety of that part of the desired result contributed by the use of the information technology does or does not relate exclusively to the known advantages provided by the use of information technology generally” (page 13). The Applicant provided examples of known advantages “as compared to humans using pen-and-paper, information technology is faster, free from human error, results are readily capable of display, storage, or transmission, and so forth” (page 12).

- [57] The Applicant considered the case of automating manual functions (pages 13-15), making the argument that (page 14):

...if the claimed novel configuration does not resolve merely to a direction to use information technology, but instead includes a particular, unconventional arrangement of constructs enabling the information technology to perform the function – that is, not merely a direction to use information technology, but specific directions as to **how** to use the information technology – then in at least some cases the desired result will include advantages over-and-above those known to be available from the use of information technology generally, because such conventional knowledge does not enable a skilled person to produce the claimed invention, and provide that part of the desired result over-and-above the conventional advantages of the use of information technology. [Emphasis in the original]

- [58] The Applicant further supported this view with the reasoning in a decision of the United States Court of Appeals for the Federal Circuit (pages 14-15), correctly noting that such a decision is not binding on the Commissioner, wherein claims directed to 3-D animation techniques incorporated specific rules that achieved an improved technology result in conventional industry practice were found to be patentable subject-matter, at least in that jurisdiction.

- [59] The Applicant concluded its analysis of automating functions as (page 15):

...[in a case where] the information technology performs the function differently from how it was performed in the human mind – then more than the known advantages of the use of information technology generally are contributed, in which case the information technology and a novel configuration thereof are “a combination of elements that cooperate together to provide a solution to a problem”, and thus constitute a “single actual invention”.

- [60] Again, in my view, the Applicant incorrectly imports considerations involving aggregations into the assessment of patentable subject-matter. As described above, *PN2020–04* sets out two primary factors for consideration concerning the functioning of a computer when reviewing computer-implemented inventions:
- a computer programmed to merely process an abstract algorithm in a well-known manner without more will not make it patentable subject-matter; and
 - if processing an algorithm improves the functionality of the computer, then the computer and the algorithm would together form a single actual invention that would be patentable.
- [61] Having considered the Applicant’s assessment approach and concluded that such an approach relies on considerations that are not entirely commensurate with those of *PN2020–04*, I turn my attention to assessing whether the claims on file are directed to patentable subject-matter as per the Office Practice.
- [62] Illustrative claim 1 as representing the claimed invention, purposively construed above, embodies the management of a consolidated account that comprises multiple accounts of non-cash assets, predicting the account balances over time by predicting income earned and withdrawals, and comparing the predicted balance with certain criteria to identify and rank potential transactions for liquidating assets if the balance is less than predicted. The method steps for managing a consolidated account are implemented by a computer.
- [63] I have already established above under “Purposive Construction” that the computer is essential to the claimed invention. But, as explained under the

heading “Principles”, this factor does not provide a definitive conclusion in an assessment of patentable subject-matter (*Amazon* at paras 61–63; *Schlumberger*, *Benjamin Moore* at 94).

[64] The Preliminary Review letter (page 13) presented my preliminary view that:

... the role of the computer in the representative claims is to process the means for managing a consolidated account in a well-known manner. The computer is merely executing the programming according to the claimed method steps. The execution of that programming does not improve the functioning of the computer, for example in terms of memory usage or processing speed. Furthermore, the application does not describe any improvements to the computer resulting from the execution of the method steps in the claimed invention.

...

Given that the computer is not part of the actual invention, the actual invention is solely directed to managing a consolidated account, an abstract set of rules or scheme for managing a consolidated account.

[65] The Applicant’s Response to the Preliminary Review letter (pages 16–21) argued that the claims on file define patent-eligible subject-matter, asserting that:

The claimed system does not involve merely a direction to use conventional information technology to perform an algorithm. Instead, the claims define a specific arrangement of constructs which enable the performance by the information technology of a function in a manner which provides advantages over conventional methods, and in particular advantages over-and-above those known to be available from the use of information technology generally.

In particular, the claimed invention concerns the automation in information technology of the performance of a function previously performed manually, and in particular by the human mind. The claimed method performed by the

information technology is different in kind from the method performed by the human mind, due to fundamental differences between how information technology and the human mind work. The claimed method is not merely automation of the method performed by the human mind.

- [66] The Applicant first asserted (page 16) a basis for a conventional approach to consolidated account management, pointing to the instant description (para 0003) highlighting “the financial advisor typically determined the amount of income expected to be earned from the assets over the year, divided that number by twelve, and used this resultant number as the fixed amount distribution available each month”. The Applicant contrasted (page 17) this subjective method performed by the human mind with the claimed objective method to a novel configuration that avoids and improves upon the subjective method of manual multi-account cash flow projection and balancing techniques by further highlighting the instant description at para 0013.
- [67] In my view, read in the entire context of the instant application, the instant description at paras 0003 and 0013 presents an example illustrating a manual cash flow estimation method. These paragraphs posit the variability of cash flow in a consolidated account and justify a need for improving the management of cash balance and cash flows from a consolidated account, as described at paras 0004 and 0005. Further, in my view, the skilled person would not consider this particular example as the only means for implementing a manual method of managing cash flow in a consolidated account, given the person skilled in art as characterised above. The Applicant’s arguments imply, incorrectly in my view, that all financial advisors using conventional methods for managing cash flows in a consolidated account were limited to this particular manual cash flow estimation approach and were never successful in managing cash flow in consolidated accounts.
- [68] Further in my view, in order to implement a computer based system, the method must, by definition, be objective. But a claim reciting an objective method doesn’t necessarily mean that the computer forms part of the actual invention. To argue otherwise would imply that all claimed computerised methods would be directed

to patentable subject-matter, which we understand from *Schlumberger* is not the determinative consideration.

- [69] To further support the Applicant's assertion that the claimed invention is to a novel information technology configuration that is different from the conventional method performed manually, such that the information technology configuration contributes more to the desired result than the known advantages of information technology generally and thereby constitutes a single actual invention, the Applicant described three examples to demonstrate how the objective novel configuration differs from the conventional industry practice. Even though my view is that such an assessment approach is incorrect, as expressed above, I will consider these examples for completeness within the assessment approach of *PN2020-04*. The proper consideration is to assess the claimed method steps, an abstract set of rules or scheme for managing a consolidated account, as implemented on a computer to determine if the computer is part of a single actual invention. There are two questions before me: Does the processing of the claimed method steps improve the functionality of the computer? And is the computer functioning in a well-known manner as a result of processing the claimed method steps?
- [70] The Applicant's Example 1 highlights the claim 1 step (d)(ii) of "identifying a list of potential transactions for the plurality of accounts in which to liquidate assets" whereby the calculation complexity would exceed what could reasonably be performed manually. The Applicant's Example 2 highlights the claim 1 step (d)(iii) of "for each potential transaction, performing step (c) above and comparing the predicted balance of the consolidated account with the predetermined criteria and discarding a potential transaction if the predicted account balance is less than the predetermined criteria" and the claim 1 step (d)(iv) of "for the potential transactions that have not been discarded, ranking the list of potential transactions for the plurality of accounts in a priority order." The Applicant argues that these steps belong to a class of mathematical optimization problems that cannot be solved or verified in polynomial time and that these steps are not practically performable in the human mind.

[71] The instant description at para 0020 teaches that potential transactions for liquidation to maintain a targeted minimum balance could use either a pre-designated asset for liquidation or “assets can be identified in priority order for liquidation for predetermined amounts in order to maintain the balance in the [consolidated managed account] as designated by the account holder”. The instant description further teaches at para 0020:

A rules engine can be used in conjunction with the assets identified for liquidation to take into account tax treatment, restrictions of liquidation of assets, minimum and maximum amounts, asset allocation, etc. The risk engine can recommend different actions based on account holder preference such as risk tolerance, account size or other variable. The risk engine can suggest other solutions such as a reduction in cash flow withdrawals, which can result from a decrease in income from declining market values, a reduction in outside income, or an increase in expenses.

[72] In my view, the instant description is silent on describing specific means resulting in the computational complexity as asserted by the Applicant. Nor does the instant description discuss the optimization problem as asserted by the Applicant in Example 2 to be addressed by the claimed solution. Furthermore, the instant application does not describe any improvements to the computer resulting from the execution of the method steps in the claimed invention, for example in terms of memory usage or processing speed. Nor does the instant application make any mention of a computer operating in anything but a well-known manner.

[73] Claim 1 steps (d)(ii), (d)(iii), (d)(iv) are not limited in any way to means resulting in the computational complexity as postulated by the Applicant. In my view, the skilled person would construe the claimed method steps broadly, based on the teachings of the instant description, as including any means for identifying, discarding, and ranking transactions, including means that merely automates previous manual methods to compute these steps. In such embodiments, the computer is functioning in a well-known manner according to the instant description and the execution of the method steps does not improve the computer.

- [74] The Applicant's Example 3 highlights that the method of claim 1 discards and ranks potential transactions to reduce the total number of potential transactions under consideration, such that the claimed method and system effectively uses the graphics user interface to display and allow navigation of prioritized records, thereby improving performance and increasing efficiency of the system.
- [75] In my view, the instant description is silent on any function beyond known advantages of a well-known computer display, as evidenced in the instant description at para 0037.
- [76] Given that the skilled person would construe the claimed elements as broad and incorporating embodiments that include the automation of previous manual methods, the situation is analogous to the one highlighted by *Amazon* at paras 61–62 describing *Schlumberger*, where the claims to an unpatentable mathematical formula were not saved by being programmed into a computer providing a practical application.
- [77] Similarly, in this case, the computer is functioning in a well-known manner, according to the instant description. There is no improvement to the computer in executing the claimed method steps. Therefore the computer does not form part of the actual invention. Instead, the actual invention is solely directed to an abstract set of rules or scheme for managing a consolidated account.
- [78] Therefore, in my view, illustrative claim 1 on file is directed to subject-matter that does not satisfy the “physicality requirement” that is implicit in the definition of “invention” (*Amazon* at paras 65 and 66) and is not compliant with section 2 of the *Patent Act*. The claim is directed to solely abstract subject-matter prohibited by subsection 27(8) of the *Patent Act*.
- [79] A similar reasoning also applies to independent method claim 14 on file directed to a method of managing a consolidated account and liquidating assets to optimize the predicted balance of the consolidated account balance against a predetermined criteria and to independent system claim 17 on file directed to a computer system embodying method claim 14. Further in my view, a similar

reasoning applies to dependent claims 2 to 13 on file, dependent claims 15 to 16 on file and dependent claims 18 and 19 on file.

- [80] Thus, in my view, none of the claims on file are directed to patentable subject-matter, as all the claims on file are directed to abstract subject-matter that does not fulfil the physicality requirement implicit in the definition of “invention” of section 2 of the *Patent Act* and is prohibited by subsection 27(8) of the *Patent Act*.

CLAIM SUPPORT BY THE ORIGINAL DESCRIPTION DEFECT

Principles

- [81] Section 60 of the *Patent Rules*, SOR/2019-251, requires claims to be fully supported by the description:

The claims must be clear and concise and must be fully supported by the description independently of any document referred to in the description.

Analysis: The claims are fully supported by the original description

- [82] The Final Action (page 6), stated that claims 1, 14, and 17 are not fully supported in the description:

The claimed features, “for the potential transactions that have not been discarded, ranking the list of potential transactions for the plurality of accounts in a priority order” are not described in the description.

- [83] The Final Action noted that the description only discloses priority order at paragraphs [0020] and [0029].

- [84] The Applicant in the Response to the Final Action (page 9) submitted that the instant description (para 0029) discloses corrective actions that can be identified, including transactions that can take place in the accounts:

Thus, the corrective action can be a listing of the accounts in priority order in which a transaction (e.g., liquidating assets) is to be taken, including identifying the specific assets to be liquidated, which can be identified based on specific criteria, e.g., minimizing tax consequences. Thus the corrective action includes an identification of the transactions to be performed in a priority order. A person of skill in the art reading the specification would appreciate that the corrective actions would include other details as well, including the amount of the liquidation ("assets can be identified in priority order for liquidation for predetermined amounts": see para. 0020), and the time for liquidation ("identified assets can be liquidated automatically at the appropriate time": see para. 0020).

- [85] The Preliminary Review letter (pages 15–16) set out my preliminary view that the claim features of concern are claim 1(d)(ii) "identifying a list of potential transactions for the plurality of accounts in which to liquidate assets to thereby increase the predicted balance of the consolidated account..." and claim 1(d)(iv) "...ranking the list of potential transactions for the plurality of accounts in a priority order."
- [86] The instant description discloses prioritizing accounts, assets, types of asset, and transactions:
- paragraph [0020]: "... assets can be identified in priority order for liquidation for predetermined amounts in order to maintain the balance in the [managed account]..."
 - paragraph [0021]: "... the account holder may prioritize which accounts to draw deposits from" and "...the asset to be liquidated can be prioritized automatically as a function of a specified criteria such as minimize tax consequences, minimize losses, maximize gains, maintain target asset allocation, etc."
 - paragraph [0023]: "...selectable parameters can identify the corrective action which corrects the greatest number of alerts, or results in the least amount of transactions, or requires the least amount of liquidations."

- paragraph [0029]:

...The automatic corrective action can be based on a set of predetermined criteria. For example, the corrective action can include identifying a list of the plurality of accounts in a priority order in which to liquidate assets to thereby increase the predicted balance of the consolidated account to satisfy the predetermined threshold. The prioritized list may designate the type of accounts can be used in priority order to make deposits to the consolidated account, or can designate the type of asset, e.g., mutual funds, stocks, etc. taking into account a specified criteria such as minimizing tax consequences, minimize losses, maximize gains, etc.

- [87] The skilled person reading the specification, including the noted references, would understand that there are many options in determining how best to maintain the consolidated account balance, including identifying and ranking transactions in a priority order. The Preliminary Review letter (page 16) held a preliminary view that claims 1, 14, and 17 are fully supported by the description.
- [88] The Applicant did not dispute this preliminary finding in their Response to the Preliminary Review letter. The Applicant also confirmed this position at the hearing.
- [89] Therefore, this review concludes that claims 1, 14, and 17 are fully supported by the description and comply with section 60 of the *Patent Rules*.

DESCRIPTION OF THE DRAWINGS DEFECT

Principles

- [90] Subsection 59(11) of the *Patent Rules* requires all reference characters to be in both the description and the drawings:

A reference character not mentioned in the description must not appear in a drawing and vice versa.

Analysis: A reference character is in the drawings but not in the description

- [91] The Final Action at page 6 stated that reference character “530” does not appear in the description but does appear in the drawings.
- [92] The Preliminary Review letter (page 16) confirmed the Final Action defect that the reference character “530” is not in the description but does appear in Fig. 4 of the drawings. Thus, the description of the drawings does not comply with subsection 59(11) of the *Patent Rules*.
- [93] The Applicant did not dispute this preliminary finding in their Response to the Preliminary Review letter, noting that both the Examiner’s Summary of Reasons and my Preliminary Review letter both acknowledged that the proposed amendment to the description dated January 2, 2020 would overcome this defect. The Applicant also confirmed this position at the hearing.
- [94] Therefore, I conclude that the description of the drawings does not comply with subsection 59(11) of the *Patent Rules*. I will consider the proposed amendments in the next section.

PROPOSED AMENDMENTS

Proposed description overcomes the description of the drawings defect

- [95] In their Response to the Final Action, the Applicant proposed amendments to the description. The proposed description adds the reference character “530” to paragraph 0023, and, beginning at paragraph 0030, adds statements corresponding to the claims on file.
- [96] The Examiner’s Summary of Reasons (page 3) noted that the proposed description would overcome the defect associated with the missing reference character in the description.

- [97] The Preliminary Review letter (page 17) held a preliminary view that the proposed description would overcome the reference character defect, but would not address the patentable subject-matter defect related to the claims on file.
- [98] The Applicant did not dispute my preliminary finding in their Response to the Preliminary Review letter. The Applicant confirmed this position at the hearing.
- [99] Therefore, I conclude, for the purposes of this review, that the proposed description overcomes the description of the drawings defect and complies with subsection 59(11) of the *Patent Rules*. However, I also conclude that the proposed description would not address the patentable subject-matter defect related to the claims on file.

Proposed claims do not overcome the patentable subject-matter defect

- [100] The Applicant proposed amendments to the claims on file in their Response to the Preliminary Review letter:
- Claims 1, 14 and 15 on file are proposed to be amended as follows:
 - To further define a first and second account of non-cash assets, each with a current value.
 - To further refine the claimed method by providing a total current value of the first and second account of non-cash assets.
 - To further refine that the priority order is based on a specified mathematical optimisation criteria of the total current value.
 - To further refine the claimed method by displaying the predicted account balance over one or more time periods and generating and displaying alerts if the predicted account balance is less than the predetermined amount.
 - Claims 3, 15, and 18 on file are proposed to be amended to further refine that the step of liquidating occurs within the selectable window of time.

- Claim 6 on file directed to displaying results and claim 13 directed to issuing alerts are proposed to be deleted and incorporated in the proposed claim 1.
- A new claim is proposed to be added that further refines the claimed method of proposed claim 1 by generating one or more actual cash flow alerts if the actual deposits can no longer provide an actual amount and timing of income matching a predicted point-in-time amount of income to be earned from the assets of the first account and the second account.
- Claim numbering and enumeration of the claimed method steps are revised to correspond to the above proposed amendments.

[101] In my view, the skilled person and their common general knowledge would be the same as identified above. The skilled person would also view the claimed methods steps and the computer-implemented elements as all essential, given that the skilled person would understand that there is no use of language indicating that any of the elements are optional.

[102] In my view, the skilled person would construe the method steps of the proposed claims broadly, based on the teachings of the instant description, as including any means for identifying, discarding, ranking, and displaying transactions. The proposed amendments are refinements of an abstract set of rules or scheme for managing a consolidated account and therefore do not change the nature of the actual invention as identified for the claims on file. In addition, the skilled person would view the computer as functioning in a well-known manner according to the instant description and the execution of the method steps does not improve the computer. Therefore the computer does not form part of the actual invention of the proposed claims. Instead, the actual invention is solely directed an abstract set of rules or scheme for managing a consolidated account, similar to the finding in the claims on file.

[103] Given that the actual invention of the proposed claims is directed to an abstract set of rules or a scheme, the subject-matter of the proposed claims does not fulfil the physicality requirement implicit in the definition of “invention” of section 2 of the *Patent Act* and is prohibited by subsection 27(8) of the *Patent Act*.

[104] It follows that the proposed claims are not considered a necessary amendment under subsection 86(11) of the *Patent Rules*.

CONCLUSIONS

[105] In light of my analysis above, I conclude:

- Claims 1 to 19 on file are directed to subject-matter prohibited under subsection 27(8) of the *Patent Act* and falling outside the definition of “invention” in section 2 of the *Patent Act*.
- Claims 1, 14, and 17 on file are fully supported by the description and comply with section 60 of the *Patent Rules*.
- A reference character is in the drawings but not in the description and therefore the application does not comply with subsection 59(11) of the *Patent Rules*.

[106] I also conclude that the proposed amended description overcomes only the reference character defect but not the patentable subject-matter defect. Further, the proposed claims would not overcome the patentable subject-matter defect of the claims on file. Therefore, the proposed amendments are not considered a “necessary” amendment for compliance with the *Patent Act* and *Patent Rules*, as required by subsection 86(11) of the *Patent Rules*.

RECOMMENDATION OF THE BOARD

[107] In view of the above, I recommend that the application be refused on the grounds that:

- Claims 1 to 19 on file are directed to subject-matter prohibited under subsection 27(8) of the *Patent Act* and falling outside the definition of “invention” in section 2 of the *Patent Act*.
- A reference character is in the drawings but not in the description and therefore the application does not comply with subsection 59(11) of the *Patent Rules*.

Lewis Robart

Member

DECISION OF THE COMMISSIONER

[108] I agree with the Board's findings and its recommendation that the application be refused on the grounds that:

- Claims 1 to 19 on file are directed to subject-matter prohibited under subsection 27(8) of the *Patent Act* and falling outside the definition of "invention" in section 2 of the *Patent Act*.

- A reference character is in the drawings but not in the description and therefore the application does not comply with subsection 59(11) of the *Patent Rules*.

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

Konstantinos Georgaras

Commissioner of Patents

Dated at Gatineau, Quebec

this 26th day of May, 2025.