TOPICS: J00 Meaning of Art

            J50 Mere Plan

SUJETS: J00 Signification de la technique

            J50 Simple Plan

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2424635, having been rejected under subsection 30(3) of the *Patent Rules* (SOR/96-423), has consequently been reviewed in accordance with paragraph 30(6)(*c*) of the *Patent Rules*. The recommendation of the Patent Appeal Board and the decision of the Commissioner are to refuse the application.

Agent for the Applicant

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INTRODUCTION

[1]   This recommendation concerns the review of rejected Canadian patent application number 2424635, which is entitled "Multiple Balance State Account Processing" and is owned by Metavante Corporation (the Applicant). A review of the rejected application has been conducted by the Patent Appeal Board (the Board) pursuant to paragraph 30(6)(*c*) of the *Patent Rules*.

[2]   As explained in more detail below, our recommendation is that the Commissioner of Patents refuse the application.

BACKGROUND

The Application

[3]   The application was filed on April 7, 2003 and was laid open to the public on June 20, 2004.

[4]   The application relates generally to processing of financial account balances at locations with differing time periods for posting and accepting entries.

Prosecution History

[5]   On April 26, 2016, a Final Action (FA) was issued pursuant to subsection 30(4) of the *Patent Rules*. The FA stated that the instant application was defective on the ground that all of the claims on file were directed to non-statutory subject matter and therefore did not comply with section 2 of the *Patent Act*.

[6]   In an October 26, 2016 response to the FA (RFA), the Applicant submitted arguments in favour of the claims complying with section 2 of the *Patent Act*. The Applicant also submitted a set of proposed claim (proposed claim set-1).

[7] The Examiner considered the application not to comply with the *Patent Act* and *Patent Rules* despite the arguments submitted with the RFA and proposed claim set-1. Therefore, pursuant to paragraph 30(6)(*c*) of the *Patent Rules*, the application was forwarded to the Board for review along with an explanation outlined in a Summary of Reasons (SOR). The SOR set out the position that the claims on file were still considered to be defective due to non-statutory subject matter.

[8] In a letter dated March 13, 2017, the Board forwarded a copy of the SOR to the Applicant. In a letter dated May 11, 2017, the Applicant indicated a continued interest in having the Board review the application.

[9] The present panel (the Panel) was formed to review the instant application under paragraph 30(6)(*c*) of the Patent Rules. The Panel sent a Preliminary Review (PR) letter to the Applicant on December 6, 2018.

[10] By telephone, the Applicant indicated that an oral hearing was desired. The Applicant submitted a written response to the PR letter (RPR) on February 20, 2019. A set of 34 proposed amended claims (proposed claim set-2) was submitted on February 22, 2019.

[11] An oral hearing was held on March 7, 2019.

ISSUE

[12] The issue to be addressed by the present review is whether claims 1-33 on file are directed to subject matter outside the definition of invention as found at section 2 of the *Patent Act*. We also consider proposed claim set-2.

LEGAL PRINCIPLES AND OFFICE PRACTICE

Purposive construction

[13] In accordance with *Free World Trust v Électro Santé Inc*, 2000 SCC 66 [*Free World Trust*], essential elements are identified through a purposive construction of the claims

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

[14]   As explained in *MOPOP* at §13.05.02c, not every element having a material effect on the operation of a given practical embodiment is essential to the solution; some recited elements define the context or environment of the embodiment but do not actually change the nature of the solution. Accordingly, purposive construction must consider which elements are required for the solution—proposed by the specification and underlying the claimed embodiment—to achieve its result.

Statutory subject matter

[15]   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.

[16]   "*Examination Practice Respecting Computer-Implemented Inventions*", PN 2013–03 (CIPO, March 2013) [*PN 2013–03*], clarifies the Patent Office's approach to determining if a computer-related invention is statutory subject matter.

[17]   As indicated in *PN 2013–03*, where a computer is found to be an essential element of a construed claim, the claimed subject matter will generally be statutory. Where, on the other hand, it is determined that the essential elements of a construed claim are limited to matter excluded from the definition of invention (e.g., the fine arts, mere ideas, schemes or rules), the claimed subject matter will not comply with section 2 of the *Patent Act*.

[18]   In the RPR, the Applicant submitted arguments which question the Patent Office's
        approach to determining essential elements in claim construction. The Applicant cited
        Progressive Games Inc v Commissioner of Patents [1999] 3 CPR 517 at page 522
        [*Progressive Games*] which in turn cited *Tennessee Eastman v Commissioner of Patents*
        1982 SCR 111. The applicant stated that the method defined by the claims is a method
        having a practical application, is a new and innovative method of applying skill and
        knowledge, and has a result or effect that is commercially useful.

[19]   As observed by the Federal Court of Appeal in *Canada (Attorney General) v
        Amazon.com*, 2011 FCA 328 [*Amazon.com*] (at para 51), the requirements listed in
        Progressive Games could be taken as broadly reflecting statutory requirements (e.g. of
        subsections 27(8) and 28.2(1), section 28.3, etc. of the *Patent Act*). They cannot,
        however, be taken as a serial three-prong test for determining whether subject matter
        belongs to a category of invention in section 2 of the *Patent Act*. For example, a subject
        matter's novelty and inventiveness (or lack thereof) does not indicate whether it is
        statutory subject matter under section 2.

[20]   The Patent Office takes the position that our practice is in line with the guidance
        expressed in *Amazon.com*. We point out that considering every item recited in a claim as
        essential according to the inventors' intent would amount to literal construction. As was
        noted in *Amazon.com* at paragraph 44:

> Purposive construction will necessarily ensure that the Commissioner is
> alive to the possibility that a patent claim may be expressed in language
> that is deliberately or inadvertently deceptive. Thus for example, what
> appears on its face to be a claim for an "art" or a "process" may, on a
> proper construction, be a claim for a mathematical formula and therefore
> not patentable subject matter.

ANALYSIS

Claim Construction

The POSITA and the relevant CGK

[21] As for the identification of the POSITA, in the PR letter, we stated:

> The POSITA is a person or team skilled in the management of accounts in international banking, and the implementation of automated processing of such accounts using general-purpose computing technology.

[22] As for the identification of the CGK, in the PR letter, we stated:

> The background of the invention indicates that the CGK of the POSITA would include at least the following knowledge [pinpoint citations below are from the instant description on file]:
>
> - customers may have a variety of different accounts with different banking entities (para 0002);
> - sweeps of accounts occur within and between banking entities based on predefined rules (para 0004-0005);
> - automatic computer-based accounting used for both batch-posting and real-time posting (para 0008);
> - programming of accounting systems;
> - end-of-day times may be pre-scheduled for groups of accounts (para 0009); and
> - bank account processing occurs in a global or international context involving 24 hour banking with different balances calculated at different times in different geographic regions (para 0011, para 0014).

[23] In the RPR and at the oral hearing, the Applicant did not disagree with these characterizations and thus we adopt them in this review.

Problem and solution

[24] In the RFA, the Applicant contended that the problem is the need for banking entities to invest heavily on improving computers' processing efficiency and capacity for batch processing, and that the problem is a computer problem. However, as we discussed in the PR letter, the Panel does not consider that the POSITA would identify a computer

problem. The background of the invention of the application on file (para 0009) notes the possibility of pre-scheduling batch processing times for groups of accounts which might not be all accounts, indicating that staggering of such times across all accounts was already known as a technique to reduce batch processing load. Further, the application on file notes conventional optimization techniques for processing efficiency (para 0057). In our view, the POSITA presented with the specification would not consider the alleged invention to be directed to solving a problem of computer resources, but rather, to be directed to solving the problem of accounting systems applying transactions that are derived at multiple intervals of an account's processing cycle against an account balance that is singular in its status definition (see background of the invention of the application on file at para 0017). In the RPR and at the hearing, the Applicant did not provide further arguments specifically in regard to the problem as identified by the Panel in the PR letter.

[25] In our view, the claimed solution is to define multiple account balance posting states for each account which permit more flexible posting (see summary of the invention of the application on file at para 0021). In the RPR and at the hearing, the Applicant did not provide further arguments in regard to the solution as identified by the Panel in the PR letter.

Essential elements

[26] We consider independent claim 1 of the claims on file to be representative:

> A method for posting transaction entries implemented by at least one processor, comprising:
>
> establishing accounts via the processor, an established account having an account record stored in an account database, the account record comprising a plurality of daily account balance records, assigning, to an established account via the processor, a posting state identifying types of transaction entries to be posted to the daily account balance records of the established account, wherein the posting state specifies that a daily account balance record is open for posting of transaction entries of a first transaction entry posting type and closed to posting of transaction entries of a second transaction entry posting type for an entire time period in which the posting state is assigned;

> receiving transaction entries via the processor, wherein a received transaction entry is associated with an established account and has a transaction entry posting type; and

> posting via the processor, a received transaction entry to a daily account balance record for the established account associated with the received transaction based upon an account posting state for the established account associated with the received transaction and a posting type of the received transaction entry.

[27] As we set out in the PR letter, we do not construe the computerized elements—a processor and database—to be essential. As indicated above in the CGK, computerized systems for bank account processing and the programming of such systems were already common at the time of the publication of the instant application. There was no problem faced in how to implement an electronic account processing system of open and closed posting periods. The description of the application on file (para 0057) notes that a programmer skilled in the art of computer based account processing systems would be able to implement the system on conventional commercially available computer systems using conventional programming languages and techniques.

[28] In the RFA and in the RPR, the Applicant argued that the computer elements should be considered essential and cited *Pollard Banknote Limited v BABN Technologies Corp. and Scientific Games Products (Canada) ULC* 2016 FC 883 [*Pollard Banknote*] at paras 74, 75, 85 and 126, noting claimed elements are to be presumed essential and a party alleging otherwise bears the onus of establishing non-essentiality.

[29] In *Pollard Banknote*, the Federal Court did not state that it intended to modify the practice surrounding purposive construction, but that it was following the principles expounded in previous jurisprudence such as *Free World Trust* and *Whirlpool*. *Pollard Banknote* at para 118 furnishes an instance of the Federal Court looking to the problem to be addressed by the patent to construe claim language. The guidance of *MOPOP,* which calls for construing the claims based on the problem and solution addressed by the invention, is also based on these principles.

[30] At the hearing, the Applicant also drew the Panel's attention to *Re eBay's Patent Application 2363903* (2014), CD 1369 (Pat App Bd & Pat Commr) [*eBay*]. Specifically, the Applicant noted that *eBay* represents an example of a computer-implemented invention involving rules in which the computing elements were construed as essential according to the problem/solution approach to purposive construction.

[31] We note that in *eBay*, at paras 33-34, the problem was determined to be one of a need to remove human processing of order status and the solution was to automate the processing, thus necessitating a computer. In the case of the instant invention, in our view the problem is not one of a need to eliminate human processing or to automate.

[32] Having considered the Applicant's arguments submitted in the RFA, RPR and at the hearing, as addressed above, the Panel considers that the elements of claim 1 that are essential to implement the solution identified above are as we set out in our PR letter:

- establishing accounts, an established account having an account record, the account record comprising a plurality of daily account balance records;
- assigning, to an established account, a posting state identifying types of transaction entries to be posted to the daily account balance records of the established account, wherein the posting state specifies that a daily account balance record is open for posting of transaction entries of a first transaction entry posting type and closed to posting of transaction entries of a second transaction entry posting type for an entire time period in which the posting state is assigned;
- receiving transaction entries, wherein a received transaction entry is associated with an established account and has a transaction entry posting type; and
- posting a received transaction entry to a daily account balance record for the established account associated with the received transaction based upon an account posting state for the established account associated with the received transaction and a posting type of the received transaction entry.

[33] Independent claim 14 is directed to a system and recites the same essential elements as claim 1.

[34] Independent claim 22 is directed to a method and is somewhat narrower than claim 1. Claim 22 additionally recites the element of the posting state having a time-varying characteristic. In our view, this element constitutes a variation of one of the rules for posting.

[35] Dependent claims 2-13, 15-21 and 23-33 recite additional elements which further detail the rules by which transaction entries may be posted or accounted for.

[36] At the hearing, the Applicant noted that dependent claims 27 and 28 specifically recite transactions at two locations in different time zones. In our view, while a computerized system involving telecommunications of information across locations and time zones is foreseen as the typical environment to practise the invention, these elements are not essential to the above-identified solution.

Statutory Subject Matter

[37] After construing the claims in light of the above-identified problem and solution, we are left with a set of rules for posting transactions according to different account states as the essential elements. Using the language of *Amazon.com,* it is our view that the essential elements of the claims are not something with physical existence or something that manifests a discernible effect or change (*Amazon.com* at para 66). They merely involve the rules for posting transactions without the production of any physical results proceeding directly from the operation of the rules themselves. Such rules are abstract in nature and do not meet the physicality requirement. Such matter is outside the categories of invention in section 2 of the *Patent Act*.

[38] Therefore in our view, claims 1 to 33 do not define statutory subject matter and thus do not comply with section 2 of the *Patent Act*.

PROPOSED CLAIM SET-2

[39] In proposed claim set-2, the independent claims recite a hardware processor rather than a processor, and recite receiving by the hardware processor a transaction entry from at least

one of an on-line capturing device or batch transaction capturing device. The independent claims also recite real time or batch processing. The independent claims further recite initiating a funds transfer from the first daily account balance record to a second account that is open to receiving the funds transfer. The dependent claims are reworded in accordance with these changes. A new dependent claim 34 is proposed which recites the on-line capturing device is an automatic teller machine or point-of-sale machine.

[40] In our view, the proposed claim changes do not add or change elements which are essential to the solution to the identified problem.

[41] In the RPR, the Applicant also noted with respect to proposed claim set-2 that:

> The claimed solution improves Internet technology, computer systems, and software applications because it enables free flow of funds and information globally among accounts located in, for example, different time zones or different geographic locations.

[42] The Applicant noted the problem of delayed end-of-day batch processing and asserted that therefore that proposed claim set-2 is directed to a solution that improves the function of a computer system of several computers through the Internet to continuously process data without delayed processing.

[43] As we stated above, in our view, the POSITA presented with the specification would not consider the alleged invention to be directed to solving a problem of computer resources, but rather, to be directed to solving a problem of inflexible accounting rules.

[44] Therefore, in our view, proposed claim set-2 does not overcome the non-statutory subject matter defect.

CONCLUSIONS

[45] We have determined that claims 1-33 are directed to non-statutory subject matter and are therefore non-compliant with section 2 of the *Patent Act.*

[46] We do not consider claim set-2 proposed on February 22, 2019 to constitute specific amendments necessary to comply with the *Patent Act* and *Patent Rules*. Accordingly, we decline to recommend that the Applicant be notified under subsection 30(6.3) of the *Patent Rules* that said proposed claims are necessary.

RECOMMENDATION OF THE BOARD

[47] We recommend that the Commissioner of Patents refuse this application as the claims on file are directed to non-statutory subject matter and are therefore non-compliant with section 2 of the *Patent Act*.

Howard Sandler   Andrew O'Malley   Andrew Strong
Member   Member   Member

DECISION

[48] I concur with the conclusions and recommendation of the Board that the application be refused on the ground that the claims on file are directed to non-statutory subject matter and are therefore non-compliant with section 2 of the *Patent Act*.

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

Johanne Bélisle
Commissioner of Patents

Dated at Gatineau, Quebec,

this 16th day of May, 2019