

Commissioner's Decision No. 1472
Décision du commissaire n° 1472

TOPICS: B-00 Indefiniteness
 J-00 Meaning of Art
 J-50 Mere Plan
 J-60 Printed Matter

SUJETS: B-00 Caractère indéfini
 J-00 Signification de la technique
 J-50 Simple plan
 J-60 Imprimés

Application No. 2488003
Demande n° 2488003

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2488003, having been rejected under subsection 30(3) of the *Patent Rules*, has subsequently been reviewed in accordance with paragraph 30(6)(c) of the *Patent Rules*. The recommendation of the Patent Appeal Board and the decision of the Commissioner are to refuse the application.

Agent for the Applicant:

GOWLING WLG (CANADA) LLP

Bentall 5

2300–550 Burrard Street

P.O. Box 30

Vancouver, British Columbia

V6C 2B5

INTRODUCTION

- [1] This recommendation concerns the review of rejected patent application number 2488003, which is entitled “Method for dynamic representation of processes and computer program product implementing same.” The patent application is owned by SAP SE. The outstanding defects indicated by the Final Action (FA) are that the claims do not comply with section 2 of the *Patent Act*, some claims do not comply with subsection 27(4) of the *Patent Act*, and one claim has a minor clerical error. The Patent Appeal Board (the Board) has reviewed the rejected application pursuant to paragraph 30(6)(c) of the *Patent Rules*. As explained below, our recommendation is to refuse the application.

BACKGROUND

The application

- [2] Canadian patent application 2488003, based on a previously filed Patent Cooperation Treaty application, is considered to have a filing date of May 30, 2003, and has been open to public inspection since December 11, 2003.
- [3] The application relates to a project development system for graphically representing the status and progress of a project.

Prosecution history

- [4] On September 23, 2015, an FA was written pursuant to subsection 30(4) of the *Patent Rules*. The FA identified the following defects in the application: claims 1 to 49 (the claims on file) do not comply with section 2 of the *Patent Act*, claims 21 to 23 do not comply with subsection 27(4) of the *Patent Act*, and claim 20 has a minor clerical error.
- [5] In its February 16, 2016 response to the FA (RFA), the Applicant submitted arguments for allowance, and proposed an amended set of 49 claims (the proposed claims) and corresponding amendments to the description. The proposed claims are generally similar to the claims on file but claims 1, 19 to 37 and 49 include amendments to address the wording issues identified in the FA. The Examiner was not persuaded by the Applicant’s arguments to withdraw the rejection. In addition, the Examiner considered that the amendments would remedy the indefiniteness defect and clerical error but not the subject matter defect.

- [6] Therefore, pursuant to subsection 30(6) of the *Patent Rules*, the application was forwarded to the Board for review, along with the Examiner's Summary of Reasons. On December 23, 2016, the Board forwarded a copy of the Summary of Reasons, with a letter acknowledging the rejection, to the Applicant. The Applicant did not respond.
- [7] A Panel was formed to review the rejected application under paragraph 30(6)(c) of the *Patent Rules* and to make a recommendation to the Commissioner as to its disposition. Following our preliminary review, we sent a letter on July 17, 2018 (the PR letter) presenting our analysis and rationale as to why, based on the record before us, the subject matter of the claims on file (as well as of the proposed claims) does not comply with section 2 of the *Patent Act*. We also considered claims 21 to 23 on file to comply with neither subsection 27(4) of the *Patent Act* nor section 84 of the *Patent Rules*, and claim 20 on file to contain a typographical error.
- [8] The Applicant responded to the PR letter on August 1, 2018, indicating its continued interest in the review but explaining that it was neither requesting a hearing nor making any further written submissions.
- [9] As nothing has changed in the written record since the preliminary review, we have maintained its rationale and conclusions.

ISSUES

- [10] The issues to be addressed by this review are whether:
- claims 1 to 49 on file define statutory subject matter as required by section 2 of the *Patent Act*;
 - claims 21 to 23 on file distinctly, explicitly and clearly define the invention as required by subsection 27(4) of the *Patent Act* and section 84 of the *Patent Rules*; and
 - claim 20 on file contains a typographical error.
- [11] After addressing these issues, we turn to the question of whether the proposed claims would constitute a necessary specific amendment under subsection 30(6.3) of the *Patent Rules*.

LEGAL PRINCIPLES AND PATENT OFFICE PRACTICE

Purposive construction

- [12] 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 at paras 49(f) and (g) and 52 [*Whirlpool*]). In accordance with the *Manual of Patent Office Practice*, revised April 2018 (CIPO) at §13.05 [*MOPOP*], the first step of purposive claim construction is to identify the skilled person and his or her relevant common general knowledge (CGK). The next step is to identify the problem addressed by the inventors and the solution put forth in the application. Essential elements can then be identified as those required to achieve the disclosed solution as claimed.
- [13] The Applicant disputed this approach in the RFA, contending that instead of focusing on the problem and solution, and determining whether the problem could be solved without an element, one should focus on each element, comparing it to potential substitutes, and determining whether the potential substitutes can provide the same function in the same way and produce the same result as the element. The Applicant also submitted that no source of law has been cited to support the above approach to purposive construction, only practice notices, which do not themselves have the authority of law.
- [14] As we explained in the PR letter:

The approach described in *MOPOP* (originally in the practice notices) was developed following *Canada (AG) v Amazon.com Inc*, 2011 FCA 328 [*Amazon.com*] and thus attempts to reflect the principles of that case, as well as those of the earlier *Free World Trust* and *Whirlpool* cases. *MOPOP* does not present itself as an authority or source of law, but instead provides guidance based on the Office’s interpretation of these authorities and sources of law.

For example, *Amazon.com* at paras 43, 44, 47, 61–63, 69, 71 explains that purposive construction “cannot be determined solely on the basis of a literal reading of the patent claims”, that claim language may be “deliberately or inadvertently deceptive” and that a claimed practical application or embodiment may nonetheless not be part of the essential elements of a claimed invention.

The guidance of *MOPOP* at §13.05.02*b* echoes these principles: a properly informed purposive construction must consider the application as a whole—

including the problem addressed by the application and its solution. The mere presence of an element in the claim language cannot override consideration of that solution during purposive construction.

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,” PN2013–03 (CIPO, March 2013) [PN2013–03] clarifies the Patent Office’s approach to determining if a computer-related invention is statutory subject matter.

[17] As explained in PN2013–03, where a computer is found to be an essential element of a construed claim, the claimed subject matter is not a disembodied invention (e.g. a mere idea, scheme, plan or set of rules, etc.), which would be non-statutory.

[18] Also relative to the present case, *MOPOP* at §§12.03.05–06 explains that where a claim is directed to subject matter having solely intellectual or aesthetic significance, the claim does not comply with section 2 of the *Patent Act*. An example given of such subject matter is “printed matter,” which, in this sense, should not be restricted to traditional ink-on-paper printing but also includes any means of displaying information.

[19] For printed matter to be statutory, it and its substrate or display means must provide a solution beyond the intellectual or aesthetic content of the printed matter itself: the solution must provide new functionality.

Indefiniteness

[20] 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.

[21] Subsection 84 of the *Patent Rules* requires claims to be clear:

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

[22] In *Minerals Separation North American Corp v Noranda Mines Ltd*, [1947] Ex CR 306 at 352, 12 CPR 99, the Court emphasized the obligation of an applicant to make clear in the claims the ambit of the monopoly sought and the requirement that the terms used in the claims be clear and precise:

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

ANALYSIS

Purposive construction

The skilled person

[23] In the PR letter, we accepted the identification in the FA of the notional skilled person as a person or team skilled in the fields of project management, project oriented software process development, computers, databases and Internet-based systems. The Applicant has not disputed this identification and we adopt it here.

The CGK

[24] Based on the application's (page 1) background description of the state of the art and the above identification of the skilled person, we identified the following concepts as CGK in the PR letter:

- general-purpose hardware and programming techniques;
- the documentation and display of projects, including their status;
- the development and management of projects;
- computerized project development systems facilitating the development and management of projects;
- graphical user interfaces (GUIs); and

- graphs, charts and other visual representations traditionally used to convey information about projects, their status and their progress.

[25] The Applicant has not disputed this identification and we adopt it here.

The problem and solution

[26] The Applicant has not disputed our identification in the PR letter of the problem and solution, so we adopt that identification and its associated reasoning here:

As observed in the FA (page 3), the application introduces the invention as being for dynamically and graphically representing a project or process. The application (page 3) explains that many projects can be complex, and projects can involve several different participants in different departments and using different technologies. A project manager may lack the expertise, information or time needed to sort through progress reports, documentation and milestone realization information from the different aspects of the project.

Accordingly, the FA identified the problem as being how to more specifically convey the relative progress and relative rate of progress of a project such that project managers are able to oversee the project more effectively. The FA identified the proposed solution as an improved scheme for graphically representing the information of the project, highlighting changes in the project, such as the completion of tasks and milestones, to the project manager.

The Applicant did not dispute these identifications of the problem and solution, and given the context provided by the application and the CGK, we preliminarily adopt them here.

The essential elements

[27] Independent claims 1 and 37 are directed to methods, independent claims 19 and 48 to software and independent claim 49 to a system. All claims on file refer to the representation of a project, including the display of a relative rate of progress for at least a portion of the project. The software and system of claims 19 and 49 correspond to the method of claim 1 and the software of claim 48 is defined as being for the implementation of the method of any of claim 37 or its dependencies.

[28] For convenience, independent claims 1 and 37 are provided below as representative of different aspects of the invention.

Claim 1. A method for representing a project, the method implemented by a system including at least one programmable processor and comprising:

accessing a database system to obtain a description of the project including a project structure, wherein the project structure includes information in an electronically accessible format from which an actual rate of progress and an expected rate of progress of at least a portion of the project can be determined;

processing the project structure using the system to determine the actual rate of progress and the expected rate of progress of at least a portion of the project;

comparing, by the system the actual rate of progress and the expected rate of progress of at least a portion of the project and thereby determining a relative rate of progress of at least the portion of the project;

generating, by the system, a graphic display on a display device, the graphic display indicating the determined relative rate of progress of at least the portion of the project; and

dynamically updating, by the system, the relative rate of progress indicated on the graphic display on the display device in response to a change in the description of the project in the database system.

Claim 37. A method for representing a project, the method implemented by a system including at least one programmable processor and comprising:

accessing a database system to obtain a description of the project including a project structure, wherein the project structure includes information in an electronically accessible format from which an actual rate of progress and an expected rate of progress of at least a portion of the project can be determined;

processing project structure using the system to determine the actual rate of progress and the expected rate of progress of at least a portion of the project;

comparing, by the system, the actual rate of progress and the expected rate of progress of at least a portion of a project and thereby determining a relative rate of progress of at least the portion of the project;

processing, by the system, the description of the project to compare an actual progress and an expected progress of at least a portion of a project and thereby determining a relative progress of at least the portion of the project; and

deriving display instructions for:

displaying relative progress of the project relative to, but independently of, an expectation of progress of the project on a graphic display;

displaying the relative rate of progress of at least the portion of the project on the graphic display relative to, but independently of, an expectation of a rate of progress, wherein the relative progress and the relative rate of progress are displayed on the graphic display using a single indicium; and

framing the indicium in a gauge to assist a user in assessing at least one of the relative progress and the relative rate of progress.

[29] Based on the problem and solution, we preliminarily accepted the identification in the FA of the essential elements. We considered the wording differences between the independent claims, and between these claims and the claims that depend on them, to simply reflect different embodiments of the same set of essential elements. According to this identification, the essential elements did not include the processor or its associated hardware elements.

[30] The Applicant disagreed with this identification in the RFA. The Applicant acknowledged that the approach used in the FA to identify the essential elements is consistent with the Office's published guidance on purposive construction, but disputed that guidance, as explained above. The Applicant submitted in the RFA that the processor and hardware elements are essential.

[31] As we explained in the PR letter, the Office's published guidance is based on the principles in *Free World Trust*, *Whirlpool* and *Amazon.com*, and set out the framework for purposive construction in the context of patent application examination. According to that framework, essential elements are those required to achieve the disclosed solution as claimed.

[32] The PR letter continued:

Our preliminary view is that the processor and associated hardware elements in the present case are not essential elements but merely the context or operating environment in which the project information is graphically represented.

MOPOP at §13.05.02c explains that not every element having an effect on the operation of a given 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.

In this case, the processor, display device, computer-readable media and other associated hardware elements do not serve to solve the problem of more specifically conveying the relative progress and relative rate of progress of a project; they merely provide the operating context. Rather, it is the graphical representation of information of specific meaning that solves the problem to be addressed. Thus, our preliminary view is that the hardware elements are not essential elements and that the essential elements are those elements directed to a scheme for graphically representing the information of the project.

[33] Since the Applicant made no further submissions following the PR letter, we adopt our preliminary identification of the essential elements here.

[34] Therefore, claims 1 to 36 and 49 on file share the same set of essential elements, a series of steps for representing a project:

- obtaining a description of a project;
- determining an actual rate of progress and an expected rate of progress of at least a portion of the project;
- comparing the actual rate of progress and the expected rate of progress of at least a portion of the project to determine a relative rate of progress of at least the portion of the project;
- graphically indicating the determined relative rate of progress of at least the portion of the project; and
- updating the graphically indicated relative rate of progress in response to a change in the description of the project.

[35] Claims 37 to 48 on file also share a set of essential elements, which is also a series of steps for representing a project:

- obtaining a description of a project;
- determining an actual rate of progress and an expected rate of progress of at least a portion of the project;
- comparing the actual rate of progress and the expected rate of progress of at least a portion of the project to determine a relative rate of progress of at least the portion of the project;
- comparing the actual progress and the expected progress of at least a portion of the project to determine a relative progress of at least the portion of the project;

- displaying a progress relative to, but independently of, an expectation of progress of the project;
- displaying, a rate of progress relative to, but independently of, an expectation of a rate of progress, using a single indicium for both the relative progress and the relative rate of progress; and
- framing the indicium in a gauge to assist a user in assessing at least one of the relative progress and the relative rate of progress.

Statutory subject matter

[36] As construed above, the essential elements are steps for graphically representing project progress information according to a certain scheme. The steps for graphically representing project information do not involve new functionality but are instead characterized by the intellectual meaning and appearance of the information.

[37] The Applicant contended in the RFA that the invention is statutory, referencing *Re Fair Isaac Corp's Patent Application 2144068* (2013), 115 CPR (4th) 39, CD 1339 (Pat App Bd & Pat Commr) [*Fair Isaac*] for support. Specifically, the Applicant submitted that the essential elements of graphically indicating the determined relative rate of progress and updating this indicated rate are clearly “something that manifests a discernible effect or change,” unlike the output signal of *Fair Isaac* (at para 40).

[38] As we noted in the PR letter:

Our preliminary view is that the graphically indicated rate of the present invention is, by itself, abstract and has only intellectual meaning—like the output signal of *Fair Isaac* (at paras 40, 46, 57). Thus, neither output has physical existence or causes a physical change or effect, and neither invention contains statutory subject matter.

[39] We also noted in the PR letter:

Furthermore, the present invention can be recognized as non-statutory subject matter with reference to *Schlumberger Canada Ltd v Canada (Commissioner of Patents)*, [1982] 1 FC 845 (CA) [*Schlumberger*]. Similar to the method in *Schlumberger*, as characterized in *Amazon.com* (at para 62), the present claims effectively attempt to patent a method of collecting, recording and analysing data, using a computer programmed according to a mathematical formula. The formula in this case is the set of rules directing the computer to determine, display and update the rates of progress. As in *Schlumberger*, the mere presence

of a computer or other physical tool does not render the otherwise abstract formula or set of rules patentable. We cannot preliminarily distinguish the present claims from the situation in *Schlumberger*, as described in *Amazon.com* (at paras 62–63, 69).

[40] Having received no further submissions on this matter, our consideration of this issue remains as it was set out in the PR letter: claims 1 to 49 on file do not define statutory subject matter and thus do not comply with section 2 of the *Patent Act*.

[41] In addition to the indication in the FA that all claims on file encompassed non-statutory subject matter due to their abstract essential elements, the FA also submitted that claim 19 is directed to software in an abstract form, due to its wording.

[42] The PR letter presented our preliminary view:

The issue, as explained in *MOPOP* at §16.08.04, is that a software claim must be clearly directed to the physical memory storing a computer program to fit within the category of “manufacture” under section 2 and avoid being automatically considered an abstract scheme, plan or set of rules for operating a computer.

Claim 19 on file recites “[a] computer program product, tangibly stored on one or more machine readable media” and is thus directed to the computer program in an excluded form as opposed to the physical medium.

[43] Having received no further submissions from the Applicant, we maintain this view.

Indefiniteness

[44] As we explained in the PR letter:

The FA (page 5) submitted that claims 21 to 23 on file are indefinite because they identify themselves as dependent on the “method of claim 20” when that claim itself recites a “computer program product”.

[45] The PR letter explained that as a result of this wording, it was our preliminary view that the preambles of claims 21 to 23 introduce avoidable ambiguity, and that these claims accordingly do not comply with subsection 27(4) of the *Patent Act* or section 84 of the *Patent Rules*.

[46] Since we have received no further submissions from the Applicant, this is our view now, as well.

Clerical error

[47] As explained in the PR letter, claim 20 on file is missing the word “claim.”

Proposed claims

- [48] We consider that the proposed claims, were they acceptable, would remedy the defects arising solely from claim wording.
- [49] However, given that these proposed amendments would not alter the above identifications of the skilled person, CGK, and problem and solution, our preliminary view is that the proposed claims would have the same sets of essential elements as identified above.
- [50] Accordingly, our view concerning non-statutory subject matter as regards these essential elements also applies to the proposed claims. It follows that the proposed claims are not considered a necessary specific amendment under subsection 30(6.3) of the *Patent Rules*, despite their correction of the defects based on claim wording.

RECOMMENDATION OF THE BOARD

- [51] In view of the above, the Panel recommends that the application be refused on the basis that:
- claims 1 to 49 on file define non-statutory subject matter and thus do not comply with section 2 of the *Patent Act*; and
 - claims 21 to 23 on file do not distinctly, explicitly and clearly define the invention, and thus do not comply with subsection 27(4) of the *Patent Act* or section 84 of the *Patent Rules*.

Leigh Matheson
Member

Paul Fitzner
Member

Andrew Strong
Member

DECISION OF THE COMMISSIONER

- [52] I concur with the findings of the Board and its recommendation to refuse the application. The claims on file do not comply with section 2 of the *Patent Act*, and claims 21 to 23 do not comply with subsection 27(4) of the *Patent Act* or section 84 of the *Patent Rules*.
- [53] 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.

Johanne Bélisle
Commissioner of Patents
Dated at Gatineau, Quebec,
this 28th day of December, 2018.