

Commissioner's Decision No. 1487
Décision du commissaire n° 1487

TOPICS: J-00 Meaning of Art
J-50 Mere Plan
O-00 Obviousness

SUJETS: J-00 Signification de la technique
J-50 Simple plan
O-00 Évidence

Application No. 2809500
Demande n° 2809500

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2809500, 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:

ADE & COMPANY INC.

2157 Henderson Highway

WINNIPEG Manitoba

R2G 1P9

INTRODUCTION

- [1] This recommendation concerns the review of rejected patent application number 2809500, which is entitled “Method and system for brokering shipping contracts between solicitors and service providers” and owned by 3S Applications, Inc. The outstanding defects indicated by the Final Action (FA) are that the claims do not define statutory subject matter, contrary to section 2 of the *Patent Act*, and are obvious, contrary to section 28.3 of the *Patent Act*. 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 2809500 was filed on March 14, 2013 and has been open to public inspection since May 22, 2013.
- [3] The application relates to a method and system for brokering shipping contracts and facilitating shipping procedures.

Prosecution history

- [4] On May 10, 2016, an FA was issued pursuant to subsection 30(4) of the *Patent Rules*. The FA indicated the application to be defective on two grounds: the claims on file (i.e. claims 1 to 9) contravene both section 2 and section 28.3 of the *Patent Act*.
- [5] In a November 7, 2016 response to the FA (RFA), the Applicant proposed a replacement specification (the proposed specification) and abstract, and submitted arguments for allowance. The claims were not amended, but the information of the background and summary sections of the proposed description has been slightly reworded and reordered to emphasize certain points. A sentence was added to the proposed abstract in line with the points now being emphasized.
- [6] The Examiner did not consider the proposal to remedy the defects and was not persuaded by the Applicant’s arguments to withdraw the rejection. Therefore, pursuant to subsection 30(6) of the *Patent Rules*, the proposed amendments were not entered on file and the application was forwarded to the Board for review. On March 24, 2017, the Board forwarded a copy of the Examiner’s Summary of

Reasons with a letter acknowledging the rejection to the Applicant. The Applicant responded on June 1, 2017 requesting the review to proceed.

- [7] A Panel was formed to review the rejected application and make a recommendation to the Commissioner as to its disposition. Following our preliminary review, we sent a letter on March 1, 2019 (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 specification) complies with neither section 2 nor paragraph 28.3(b) of the *Patent Act*.
- [8] The Applicant responded to the PR letter on March 11, 2019 indicating that a hearing was no longer desired and that no further written submissions would be made.
- [9] Nothing has changed in the written record since the preliminary review, so we have maintained its rationale and conclusions.

ISSUES

- [10] The two issues to be addressed by this review are whether the claims on file:
 - define subject matter falling within the definition of invention in section 2 of the *Patent Act*; and
 - define subject matter that would not have been obvious, as required by paragraph 28.3(b) of the *Patent Act*.
- [11] After addressing these issues, we turn to the question of whether the proposed specification 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). 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 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 elements of the claimed matter that are fundamental to the disclosed solution.

- [13] In the RFA (pages 15 to 22), the Applicant disagreed with what it called “this problem/solution approach to purposive construction” where the essential elements are those required to solve the problem, submitting that it has no basis in Canadian law.
- [14] Referring to the test for essentiality outlined in *Free World Trust*, the RFA contended that for an element to be non-essential, “a substituted variant or an omission of an element must perform substantially the same function in substantially the same way to obtain substantially the same result” *and* that the intent of the inventor as expressed in the claims is for the element to be substitutable or omissible. The RFA also referred to the affirmation in *Canada (AG) v Amazon.com Inc*, 2011 FCA 328 [*Amazon.com*] that it is the wording of the claims purposively construed that must be considered.
- [15] As we noted in the PR letter, however, *Easton Sports Canada Inc v Bauer Hockey Corp*, 2011 FCA 83 (at paragraphs 31, 33, 39 and 40) confirms that *Free World Trust* sets out the requirements for non-essentiality in the alternative. That is to say, an element is non-essential if the claim language indicates so *or* if the substitutability of the element would have been appreciable to the skilled person.
- [16] Further, the Federal Court of Appeal in *Amazon.com* (at paragraphs 43, 44, 62 and 63) mandated the assessment of patentable subject matter on the basis of purposive construction, which “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.” The Court gave the situation in *Schlumberger Canada Ltd v Commissioner of Patents*, [1982] 1 FC 845 (FCA) as an example, saying that on a proper construction, the claimed invention there was “for a mathematical formula and therefore not patentable subject matter” despite its appearance as “an ‘art’ or ‘process’” and the fact that the mathematical formula was programmed into a computer.
- [17] 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 description and underlying the claimed embodiment—to achieve its result.

Statutory subject matter

[18] 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.

[19] “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.

[20] 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. mere ideas, schemes, plans or sets of rules, etc.), which would be non-statutory.

Obviousness

[21] Section 28.3 of the *Patent Act* requires claimed subject matter to not be obvious:

The subject-matter defined by a claim in an application for a patent in Canada must be subject-matter that would not have been obvious on the claim date to a person skilled in the art or science to which it pertains, having regard to

- (a) information disclosed more than one year before the filing date by the Applicant, or by a person who obtained knowledge, directly or indirectly, from the Applicant in such a manner that the information became available to the public in Canada or elsewhere; and
- (b) information disclosed before the claim date by a person not mentioned in paragraph (a) in such a manner that the information became available to the public in Canada or elsewhere.

[22] In *Apotex v Sanofi-Synthelabo Canada*, 2008 SCC 61 at paragraph 67 [Sanofi], the Supreme Court of Canada stated that it is useful in an obviousness inquiry to follow the following four-step approach:

- (1)(a) Identify the notional “person skilled in the art”;
- (b) Identify the relevant CGK of that person;
- (2) Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;

- (3) Identify what, if any, differences exist between the matter cited as forming part of the “state of the art” and the inventive concept of the claim or the claim as construed;
- (4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention?

ANALYSIS

[23] The FA cited the following references as relevant and we repeated the citation in the PR letter:

- | | | | |
|------|-----------------|-------------------|-------------------|
| • D1 | US 8352324 | January 8, 2013 | Moderegger et al. |
| • D2 | CA 2352761 | June 8, 2000 | Gindlesperger |
| • D3 | US 6131087 | October 10, 2000 | Luke et al. |
| • D4 | US 2001/0047284 | November 29, 2001 | Blalock et al. |

Purposive construction

The skilled person and the relevant CGK

[24] As indicated in the PR letter, we identified the notional skilled person as a team comprising a logistics professional experienced with shipping contract brokering processes, and a programmer or other technologist experienced with developing and providing the software, tools and infrastructure conventionally used to support such professionals.

[25] We then identified the following as CGK:

- familiarity with the shipping process, the processes and systems typically employed to broker contracts and engage shipping services, and with the limitations of such processes and systems;
- general-purpose computer hardware and computer programming techniques;
- conventional use of computer communications networks;
- the recognition that advantages can be seized by using computers, software, modern communications infrastructure, etc., to automate or facilitate steps in administrative procedures, such as contract brokering processes; and
- the use of a unique identification number to permit persons to correctly access a document, file, issue, etc. of interest.

- [26] We based the inclusion of these points on the above identification of the skilled person, on the description of the state of the art in the application (pages 1 to 2), D1 (columns 1 to 3), D2 (pages 1 to 11), D3 (columns 1 to 3) and D4 (paragraphs 1 to 5), and on the low detail in the present description concerning computerization of the brokering process. As further support of the final point, D3 (columns 5 and 10) provides an example in its disclosure of the use of unique contract identification numbers, permitting the involved parties to access the appropriate transaction information in the database.

Problem and solution

- [27] The Applicant contended in the RFA that the problem is one of preventing bias in the solicitor's decision of which service provider to select to receive the shipping contract. Accordingly, the Applicant submitted that the solution resides in the communication of quotation parameters from the service providers only via data fields in a standardized format, thus preventing the conveyance of extraneous and potentially biasing information.
- [28] The description (pages 1 to 2) explains that while some steps of the processes employed for engaging shipping services have been partially automated using modern technologies or standalone solutions, these processes are nonetheless usually labour-intensive and time-consuming to operate, and do not always result in the most cost-efficient option. This is related to the heavy reliance of the solicitors on human-made assessments, decisions and communication (as opposed to those helped or regulated by automated systems), due to there being no unified process standards for efficiently managing all common shipping tasks. Furthermore, service providers have neither the ability to dictate a level of automation to solicitors nor the will to create for them an automated solution. As a solution to these issues, the application proposes a method and system allowing efficient brokering of shipping contracts by using streamlined standardized formatting to assess and make an unbiased decision.
- [29] The description does not refer to any challenges in implementing a computer and communications system for the brokering process. The passages (pages 10, 11, 14 and 16) describing the computer and communications functions of the system, and its possible hardware, do so only at a high level and generically.
- [30] Thus, as explained in the PR letter, given the level and nature of the detail in the description regarding the implementation, the skilled person would understand the

problem not to lie in how to computerize the process or how to implement the process using computer systems, but in the lack of standardized formatting for recording and assessing the data in the brokering process. This understanding would be consistent with the encompassment within the CGK of computer and communications systems for facilitating and automating steps in the brokering process.

- [31] Accordingly, we see the solution to be the use of streamlined standardized formatting to efficiently and transparently make assessments and unbiased decisions in the shipping contract brokering process.

The essential elements

- [32] Independent claims 1 and 7 on file are directed to systems and independent claim 8 is directed to a method. All independent claims on file refer to a computer system (or its operation) for accepting, communicating and storing information related to the process of a solicitor communicating requests for quotes to selected service providers, receiving quotes from the service providers and communicating the solicitor's selection thereof, wherein the details of the quote are wholly within data fields of prescribed standardized format and this quote is the sole source of input from the service providers into the process. The dependent claims on file recite further details regarding what is communicated and the contents of the data fields.
- [33] As claim 7 is the narrowest of the independent claims, it is provided below as a reference:

7. A system for executing shipping contracting communications between a solicitor and a service provider comprising:

a. client computer hardware means configured to enable the solicitor and the service provider to send and receive communications over a communication network, the client computer hardware means including a first computer readable memory and statements and instructions stored thereon for execution by a first processor to

(i) enable the solicitor to input service provider entity details and service provider contact information for a plurality of known service providers that said solicitor has existing relationships with, or knowledge of, in order to generate a predefined set of service providers;

- (ii) enable the solicitor to input a quote request for a required shipping service and select particular service providers from among the predefined set of service providers to generate a distribution list of service providers to whom a quote request for said required shipping service is to be distributed; and

- (iii) enable each of the particular service providers in the distribution list to input respective quotes;

b. means to store data sets of

- (i) the service provider identity and contact information;

- (ii) required shipping service parameters from the quote request inputted by the solicitor; and

- (iii) quote details from the quotes inputted by the service provider; and

c. central computer hardware means, including a second first computer readable memory and statements and instructions stored thereon for execution by a second processor to:

- (i) receive solicitor communication from the solicitor that includes the quote request and information concerning the particular service providers included in the distribution list;

- (ii) distribute communication to the particular service providers in the distribution list containing details of the quote request for the required shipping service;

- (iii) receive service provider communications from at least some of the particular service providers in the distribution list containing the respective quotes for the required shipping service;

- (iv) match the service provider communication and solicitor communications on the basis of a unique identification number;

- (v) generate a report in which the quotes received in the service provider communications are grouped based on the details of the quote request previously inputted by the solicitor and distributed by the central computer hardware and software means;

- (vi) record a solicitor-awarded contract based on selection by the solicitor of one of the quotes received through the service provider communications from said at least some of the particular service providers;

(vii) send a notification of the solicitor-awarded contract to a one of the particular service providers whose quote was selected by the solicitor;

(viii) send a notification of rejection to one or more of the particular service providers whose quote was not selected by the solicitor;

(ix) send a notification of bid closing to any of the particular service providers in the distribution list that did not submit a quote; and

(x) receive a post-awarding communication from the one of the particular service providers who has been awarded the contract, the post-awarding communication containing updates about progress of the required shipping service;

wherein the central computer hardware means is configured such that receiving the service provider communications in step (iii) comprises retrieving the quotes from said at least some of the particular service providers only via data fields of prescribed standardized format, and using said fields of prescribed standardized format as a sole source of input from said at least some of the particular service providers for the service provider communications, and the prescribed standardized form of the sole source of input from said at least some of the particular service providers prevents conveyance of extraneous information from said at least some of the particular service providers within the quotes, which otherwise could potentially bias the solicitor's selection from among the quotes in step (vi).

[34] The RFA submitted that not only should the use of data fields of prescribed standardized format be among the essential elements, but that this use inherently renders the recited computer essential as well.

[35] Our view is that the solution is the use of streamlined standardized formatting to efficiently and transparently make assessments and unbiased decisions in the shipping contract brokering process. As explained in the PR letter, this change in the brokering process depends on the use of standardized and formatted data fields, but does not depend on the process being computerized or on how its results are communicated. The solution is not the idea of using computers, or how to do so. In fact, it is CGK to computerize elements of the shipping contract brokering process. For example, once the decision is made to limit an information provider to specific

types of data and formats, techniques from the CGK involving either paper-based or computer-based forms present themselves. Therefore, while the recited elements relating to computer hardware or a computer network help define the context or operating environment of the claimed embodiment, they do not actually change the nature of the solution. They could be substituted with other elements without changing the nature of the solution.

[36] Accordingly, our view is that the essential elements of claim 1 are the following steps and rules governing the procedure for making assessments and decisions in the shipping contract brokering process:

- receiving, from a solicitor, entity details and contact information for a plurality of known service providers to generate a predefined set of service providers for the solicitor;
- receiving, from the solicitor, information about a required shipping service and on particular service providers selected from the solicitor's set to receive a request for a quote (RFQ);
- distributing details of the required shipping service to the service providers selected to receive an RFQ;
- receiving, from at least some of the service providers who received an RFQ, details of a quote for the required shipping service, wherein:
 - the details are provided solely via data fields of prescribed standardized format and are the sole source of input from the service providers selected to receive an RFQ, thus preventing conveyance of potentially biasing extraneous information to the solicitor; and
- generating a report notification about the received quotes upon completion of a quoting period.

[37] Independent claim 8 shares these essential elements but also includes the following steps:

- upon the solicitor indicating the service provider whose quote the solicitor selected from the report notification, sending confirmation of an awarded contract to the indicated service provider;
- sending a notification of rejection to the one or more service providers whose quotes were not selected;
- sending a notification of bid closing to at least one of the particular service providers that did not submit a quote; and

- making available a notification of shipment status and details as a post-awarding communication between the solicitor and the indicated service provider.

[38] Like the other essential elements, these additional steps pertain to the decision-making procedure in the contract brokering process, not to any computer elements. Similarly, independent claim 7 shares the same essential elements with claim 8 but also includes the step of matching service provider and solicitor communications on the basis of a unique identification number.

[39] We consider the wording differences between the dependent claims and the independent claims from which they stem to simply reflect different embodiments of the same set of essential elements.

Statutory subject matter

[40] The Applicant submitted in the RFA that since tangible computer elements were among the essential elements (being necessary for the data fields of prescribed standardized format, contended the Applicant), the claimed invention is patent-eligible.

[41] As construed above, however, the essential elements here are the steps and rules governing the procedure for making assessments and decisions in the shipping contract brokering process; a computer is not among the essential elements. Such matter does not manifest a discernible effect or change of character or condition in a physical object. It merely involves the carrying out of a plan or theory of action without the production of any physical results proceeding directly from the operation of the theory or plan itself. Such matter is outside the categories of invention in section 2.

[42] Therefore, our view is that claims 1 to 9 do not define statutory subject-matter and thus do not comply with section 2 of the *Patent Act*.

Obviousness

Identify the notional person skilled in the art and the relevant CGK

[43] The above identifications of the notional skilled person and relevant CGK are considered to be applicable for the purpose of assessing obviousness.

Identify the inventive concept of the claim in question or if that cannot readily be done, construe it

[44] We take the construction of the claims as also representing their inventive concepts.

Identify what, if any, differences exist between the matter cited as forming part of the “state of the art” and the inventive concept of the claim or the claim as construed

[45] As explained in the PR letter, we consider D1 to be the most relevant cited reference. It (abstract; columns 2, 3, 5, 6, 9 and 13) discloses a system for managing the solicitation and evaluation of bids for the delivery of goods and services. Use of the system includes the creation, by a solicitor, of a database of information on a set of service providers, and the input by the solicitor of information about a required shipping service and a selection of service providers to receive an RFQ for the shipping service. The RFQs are distributed to the selected service providers, at least some of whom respond with a quote for the service. Once the submissions deadline is reached, the solicitor receives a report notification about the received quotes. The solicitor selects one of the received quotes and the contract is awarded to the associated service provider. Post-award communications take place between the solicitor and the service provider as the performance of the shipping service is monitored and evaluated.

[46] Regarding all the claims, D1 does not explicitly disclose that the sole source of input from the service providers are the quote details communicated via data fields of prescribed standardized format.

[47] In addition, regarding only claims 7 to 9, D1 also does not disclose the sending of notifications of rejection or of the passing of the submission deadline.

[48] In addition, regarding only claim 7, D1 additionally does not explicitly disclose the use of a unique identification number to match communications.

Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention

[49] In regards to the difference between D1 and all the claims, D1 (columns 1, 3, 12, 13) does not disclose that the sole source of input from the service providers are the quote details communicated via data fields of prescribed standardized format. It does, however, recognize the importance of a common understanding between the solicitor and the service provider regarding the details of the service and the

requirements for the quote, and the importance of the received quotes following a consistent format permitting their fair evaluation and comparison. To this end, D1 discloses the use of a “mask” (a sort of form with spaces for specific input), samples of text, data fields and data validation to ensure a service provider includes in a quote the correct types of data, in the appropriate format.

- [50] In addition, D4 (paragraphs 211 to 215 and 222 to 228; figures 27-4, 27-5 and 30-1) discloses a system for negotiating transportation contracts that also requires service providers to provide their quote details via data fields of prescribed standardized format. Given the similar business contexts of D1 and D4, and the same general role and functioning of their systems, the skilled person would be motivated to combine their teachings where it made evident sense to do so. Absent some obstacle, it would not constitute an inventive step to add the features or functioning of one to the other. In our view, it would thus be obvious to require service providers to use such data fields to communicate quote details.
- [51] As for limiting the communications between the solicitor and the service providers, D1 (columns 10 and 13) also recognizes the importance of avoiding price fixing and irregularities in the brokering process, and discloses the restriction of communications during the process to do so. Given this recognition, as well as the CGK of shipping contract brokering processes, it would also be obvious to limit a service provider’s communication with a solicitor to this controlled input of quote details during the process.
- [52] Regarding the additional difference between D1 and each of claims 7 to 9, D4 (paragraphs 79, 214 to 215 and 220; figure 26-1) further discloses that service providers can receive timely notification of rejections and that the end date for submitting quotes is communicated to all service providers receiving the RFQ. Given the CGK concerning shipping contract brokering processes, our view is that it would be obvious to modify the system of D1 to implement such notifications as disclosed by D4.
- [53] Regarding the additional difference between D1 and claim 7 specifically, it is CGK to use a unique identification number to permit persons to correctly access a document, file, issue, etc. of interest. It would thus be obvious to reference such a number in communications to ensure that the involved parties refer to the same (and appropriate) information.

Conclusion on obviousness

- [54] We consider that the subject matter of claims 1 to 9 on file would have been obvious to the skilled person in view of D1, having regard to D4 and the CGK. Therefore, the claims do not comply with paragraph 28.3(b) of the *Patent Act*.

Proposed specification

- [55] As stated above, the Applicant proposed an amended description and abstract. The RFA stated that the amendments to the description were to include the elements of the independent claims in the summary of the invention and to emphasize a certain problem and solution.
- [56] The proposed description states that a main problem is the heavy reliance of solicitors on human decisions versus decisions made with the help of a computer automated system allowing transparent, unbiased comparison and selection of received quotes. The description adds that the capability of making fully unbiased decisions is further diminished by the human factor in communications between solicitors and service providers. Next, the proposed description stated that its main object was a method and system allowing the brokering of a shipping service contract in a manner preventing the introduction of bias.
- [57] As we noted in the PR letter, the solution would nonetheless be achieved in the same way via the use of streamlined standardized formatting to assess and make an unbiased decision.
- [58] Accordingly, our view is that the construction of the claims of the proposed specification would be unchanged by the proposed amendments to the description.
- [59] Therefore, our view concerning non-statutory subject matter and obviousness also applies to the proposed specification. It follows that the proposed specification is not considered a necessary specific amendment under subsection 30(6.3) of the *Patent Rules*.

RECOMMENDATION OF THE BOARD

[60] In view of the above, the Panel recommends that the application be refused on the basis that:

- Claims 1 to 9 define non-statutory subject matter and thus do not comply with section 2 of the *Patent Act*; and
- Claims 1 to 9 define subject matter that would have been obvious as of the claim date and thus do not comply with paragraph 28.3(b) of the *Patent Act*.

Leigh Matheson
Member

Paul Fitzner
Member

Liang Ji
Member

DECISION OF THE COMMISSIONER

[61] I concur with the findings of the Board and its recommendation to refuse the application. The claims on file comply with neither section 2 nor paragraph 28.3(b) of the *Patent Act*.

[62] 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 4th day of July, 2019