

Commissioner's Decision No. 1436
Décision de la Commissaire n° 1436

TOPICS: B-00 Ambiguity or Indefiniteness
J-00 Meaning of Art
J-50 Mere Plan
O-00 Obviousness

SUJETS: B-00 Caractère ambigu ou indéfini
J-00 Signification de la technique
J-50 Simple plan
O-00 Évidence

Application No. 2,378,863
Demande n° 2 378 863

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,378,863, 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:

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INTRODUCTION

- [1] This recommendation concerns the review of rejected patent application number 2,378,863, which is entitled “Delivery notice and method of using same” and is owned by United Parcel Service of America, Inc. The outstanding defects are that the claims do not define statutory subject matter, contrary to section 2 of the *Patent Act*, are obvious, contrary to paragraph 28.3(b) of the *Patent Act* and are indefinite and unclear, contrary to subsection 27(4) of the *Patent Act* as well as section 84 of the *Patent Rules*. 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 2 378 863 was filed March 28, 2001 and published November 15, 2001.
- [3] The application relates to the delivery of parcels and the leaving of delivery notices when parcels are undeliverable. The delivery notice contains an identifying indicium that is used to link the delivery attempt to information about it and to information about the parcels involved.

Prosecution history

- [4] On October 31, 2014, a Final Action (FA) was written pursuant to subsection 30(4) of the *Patent Rules*. The FA states that the application is defective on two grounds. One is that the claims on file (i.e. claims 1 to 32) do not comply with section 2 of the *Patent Act* and the other is that they do not comply with section 28.3 of the *Patent Act*.
- [5] In an April 29, 2015 response to the FA (R-FA), the Applicant submitted arguments for allowance. In particular, the Applicant contended that the claims on file include physical and electronic elements (and are thus directed to statutory subject matter). The Applicant also contended that the claims on file are not obvious in view of the references cited in the FA.
- [6] As the Examiner considered the application not to comply with the *Patent Act*, the application was forwarded to the Board for review on July 14, 2015, pursuant to subsection 30(6) of the *Patent Rules*, along with a Summary of Reasons (SOR) maintaining the rejection of the application based on the defects indicated in the FA.

- [7] With a letter dated July 27, 2015, the Board forwarded the Applicant a copy of the SOR and offered the Applicant the opportunities to make further written submissions and to attend an oral hearing. In its response on January 27, 2016, the Applicant made further submissions regarding subject matter and obviousness, declined the offer of an oral hearing and instead requested the review to proceed based on the current written record.
- [8] A Panel was formed to review the application under paragraph 30(6)(c) of the *Patent Rules* and make a recommendation to the Commissioner as to its disposition. In a letter dated May 11, 2017 (the Panel Letter), we set out our preliminary analysis and rationale as to why, based on the record before us, the subject matter of the claims on file does not comply with section 2 or paragraph 28.3(b) of the *Patent Act*. We also observed that two of the claims do not comply with subsection 27(4) of the *Patent Act* or section 84 of the *Patent Rules*.
- [9] On June 12, 2017, the Applicant acknowledged receipt of the Panel Letter but stated that it did not wish to file any further submission.

ISSUES

- [10] The three issues to be resolved 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*;
 - Whether the claims on file define subject matter that would not have been obvious as of the claim date, thus complying with paragraph 28.3(b) of the *Patent Act*; and
 - Whether the claims on file distinctly and explicitly define subject matter, and are clear, thus complying with subsection 27(4) of the *Patent Act* and section 84 of the *Patent Rules*.

LEGAL PRINCIPLES AND OFFICE PRACTICE

Purposive construction

- [11] In accordance with *Free World Trust v. Électro Santé*, 2000 SCC 66, 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 v. Camco*, 2000 SCC 67 at paragraphs 49(f) and (g) and 52). In accordance with the *Manual of Patent Office Practice*, revised June 2015 (CIPO) at § 13.05, 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.

Statutory subject matter

[12] 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.

[13] “Examination Practice Respecting Computer-Implemented Inventions”, PN2013-03 (CIPO, March 2013) [PN2013-03] clarifies the Office’s approach to determining if a computer-related invention is statutory subject matter.

[14] As stated in PN2013-03, 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, methods of medical treatment, mere ideas, schemes or rules, etc.), the claimed subject matter will not be compliant with section 2 of the *Patent Act*.

Obviousness

[15] 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.

[16] 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?

Distinctness and clarity

- [17] 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.

- [18] 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.

- [19] In *Minerals Separation North American Corp v Noranda Mines Ltd*, [1947] Ex. C.R. 306, 12 C.P.R. 99 at 146, the Court emphasized both 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

- [20] In the Panel Letter, we identified the skilled person as a team comprising a logistics professional experienced in fields involving parcel delivery and tracking services, and a programmer or other technologist experienced with developing or selecting the software, tools and infrastructure, and using them to support such professionals. The Applicant has not disputed this identification and we adopt it here.

The CGK

[21] Based on the identification of the CGK in the FA and on the application's description of the background art, we identified the following concepts as CGK in the Panel Letter:

- The procedures and tools typically involved in parcel delivery and tracking services;
- General-purpose computing devices and appropriate programming techniques;
- The practice of leaving of a delivery notice when a parcel is undeliverable (e.g. because the recipient is not home);
- The practice of the recipient of a delivery notice contacting (e.g. via telephone) the delivery service to find out information or reschedule delivery;
- The use of identifying information, such as a tracking number, on a parcel;
- The use of bar codes on delivery notices and parcels;
- The use of a portable device to scan the bar codes from the delivery notices and parcels, and to relay this (and other) information to a central computer for updating a database of parcel tracking information;
- The use of the tracking number, by the sender or recipient, to retrieve parcel tracking information (e.g. delivery status) from the central computer via an Internet-connected computer;
- A delivery may involve multiple parcels or items (the delivery of multiple items to a recipient at the same time would necessarily occur at least occasionally; and
- One can use a common data point associated with one or more parcels (e.g. an intended recipient's name or address) to determine the location of the parcels, at least manually.

[22] The Applicant has not disputed the identification of the CGK and we adopt it here.

The problem to be solved

[23] The Applicant did not dispute the FA's identification of the problem. In the Panel Letter, we accepted this identification as well, based on the application's description of the problem.

[24] Delivery notices with some information are typically left by delivery service personnel in the event a delivery is unsuccessful due to the absence of the recipient. It is nonetheless difficult for the recipient (and delivery service) to use that information to obtain the details as well as current status of the delivery and of the involved parcel or parcels. The conventional delivery service maintains information about deliveries and information about parcels, but does not directly link the information together.

The proposed solution

- [25] As stated in the Panel Letter, the application proposes as a solution that each delivery notice bear a unique number or identifier and that when delivery service personnel must leave a notice, they record this identifier, the identifiers of the involved parcels and any relevant information, associated with each other. Thus, given an identifier from a delivery notice, a recipient can retrieve information about the delivery and any involved parcels, including their identifiers.
- [26] The problem and solution do not lie in any tools or equipment used to read information from the delivery notices, to communicate the information to a central computer or to store information in, or retrieve information from, a database at the central computer. These tools are not the focus of the application and, in any case, represent solutions to problems made well before the present application. Rather, the solution of the present application relates to the generation, storage and use of the identifier information and to the significance of that information.
- [27] The Applicant has not disputed this characterization of the solution.

The essential elements

- [28] For convenience, claim 1 is provided below as a representative of the claims:

1. A system for delivering a plurality of unique items each having unique identities and each having a different machine-readable item code readable therefrom, said system comprising:
 - A) a plurality of delivery notices, each of said delivery notices including a machine-readable delivery notice code thereon, each of said delivery notice codes being unique within said plurality of delivery notices;
 - B) a code-reading device having means for reading said machine-readable delivery notice code from one of said delivery notices as well as reading said machine-readable item code from each of said plurality of items, said delivery notice code being different than each of said plurality of item codes; and
 - C) a code storing device having a memory, said device having means for receiving said delivery notice code and said plurality of item codes from said code-reading device and storing said delivery notice code and said plurality of item codes and a link between said notice code and said item codes in said memory.

- [29] As we noted in the Panel Letter, the preambles of the claims direct them to systems and software, and the dependent claims introduce various additional details. Nonetheless, based on the problem and solution identified above, we consider these wording differences to simply reflect different embodiments of the same set of essential elements. We believe, based on the CGK and on the problem and solution

according to the application, that the skilled person would understand the set of essential elements to be the same for each of claims 1 to 32 and to be for maintaining and making available delivery and parcel information in a certain way.

[30] These essential elements comprise:

- Generating a unique delivery notice code for each of a set of delivery notices;
- Generating a unique item code for each of a set of items to be involved in a delivery, wherein the delivery notice codes are different from the item codes; and in the event of an unsuccessful delivery,
- Recording the delivery notice code from one of the delivery notices and the item codes from each of the items such that the delivery notice code is associated with each of the item codes.

[31] Although the Applicant made no further submissions concerning the essential elements following the Panel Letter, it had previously contended in the R-FA and the Applicant's letter of January 27, 2016 that the essential elements should include the Internet and the physical details recited by the claims. The Applicant had argued that these elements are necessary to obtain information about the items involved in the delivery attempt, provide real-time operation, overcome the computer-related challenges in scanning the codes from the delivery notices and the items, and link stored data in a database.

[32] As explained by the Panel Letter, the use of these physical elements (or the Internet) is outside the concern of the problem and solution. The application proposes to solve the problem of making it less difficult to access certain information by maintaining and organizing information with certain meaning. The application does not propose to solve a problem of reading bar codes from parcels or notices, of storing or associating data in a database, or of communicating information from one computer to another in real time. In any case, these problems have been solved, and their solutions are part of the CGK. Therefore, such physical elements may be part of the working environment of the invention but are not essential elements of the invention itself.

[33] Therefore, our view is that the essential elements of claims 1 to 32, as purposively construed, are the steps and rules defining the maintenance, organization and use of information with certain meaning. The recited physical elements—the delivery notices, code-reading devices, code-storing devices and software storage media—are considered to be non-essential elements.

Statutory subject matter

- [34] As construed above, the essential elements of claims 1 to 32 are steps and rules defining the maintenance, organization and use of information with certain meaning. Such matter is outside the categories of invention within section 2 of the *Patent Act*.
- [35] Therefore, as stated in the Panel Letter, claims 1 to 32 do not define statutory subject matter, and thus do not comply with section 2 of the *Patent Act*.

Obviousness

Identify the notional skilled person and the relevant CGK

- [36] The above identification of the notional skilled person and relevant CGK (paragraphs 20 and 21) 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

- [37] The FA identifies all 32 claims as sharing the same inventive concept, which is effectively the same as the set of essential elements it construes the claims as having. The R-FA does not dispute this identification.
- [38] Accordingly, in the Panel Letter, we took this set of essential elements as also representing the inventive concept of these claims; we again adopt that approach here.

Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive concept

- [39] As stated in the Panel Letter, the most relevant reference cited in the FA appears to be:

- D1: US 6 021 942 February 8, 2000 Monico

- [40] D1 discloses a method for facilitating delivery of a package that involves using a delivery notice from a set of such notices, each with its own machine-readable unique delivery notice code. In the event of an unsuccessful delivery, a delivery notice is left, and a scanner is used to record its code and transmit it for automatic entry into a database. D1 also refers to package tracking numbers, indicating recognition of the conventional practice of generating a machine-readable unique item code for each of the set of items to be delivered. In the preferred embodiment disclosed by D1, the delivery notice code is different from these item codes.

- [41] However, although D1 does not appear intended to exclude the scenario where a delivery involves multiple parcels or containers, it only explicitly describes the scenario where a delivery notice is used for each item. D1 also does not explicitly disclose the recording of both delivery notice codes and item codes or the association of a notice code with the item codes of multiple items.
- [42] Also regarding the state of the art, the Panel Letter notes that the present application acknowledges as prior art the leaving of a single delivery notice when attempted delivery of multiple parcels has failed; this acknowledgement does not extend to the involvement of unique delivery notice codes or the recording of an association of the delivery notice with the involved parcels, however.

Do those differences constitute steps which would have been obvious to the skilled person or do they require any degree of invention

- [43] As we observed in the Panel Letter, it was CGK to store related information with an item code or tracking number in a parcel tracking system—storage of such a code or number by itself in the system would be useless.
- [44] In D1, the information recorded from the delivery notice is readily available information pertinent to the delivery status of the involved parcels. It would thus be obvious to the skilled person, faced with the question of how best to store this recorded information such that it can be usefully retrieved, to store it, including the unique delivery notice code, among the rest of the delivery status information conventionally stored in a parcel tracking system and associated with the item code of the parcel of the attempted delivery.
- [45] As explained in the Panel Letter, it was also CGK that a delivery may involve multiple parcels or items. The two most likely alternatives for handling an attempted delivery of multiple items while employing the method of D1 would be to leave a single delivery notice or to leave a separate notice for each parcel. The first alternative would appear to the skilled person as an obvious common-sense choice to avoid excessive use of the notices, to reduce the steps needed by the delivery personnel at the attempted delivery location in recording multiple notice codes and affixing multiple notices, and to reduce the steps needed by the intended recipient to query information about the involved parcels. As mentioned, it was CGK to associate a parcel or group of parcels with a common data point, such as an intended recipient's address.
- [46] In addition, the first alternative would be closer to the known practice of leaving a single delivery notice even when the attempted delivery involved multiple parcels.
- [47] Therefore, given that it was CGK to store an item code associated with a delivery notice code, it would require no inventive step from the skilled person to associate multiple items codes with a single delivery notice code.

- [48] Accordingly, the difference between the matter cited as forming part of the state of the art and the inventive concept would not require any degree of invention from the skilled person.
- [49] As stated above, all 32 claims share the same inventive concept. Even if the further details recited by the dependent claims were considered to add to or refine this inventive concept, however, they would not have required any degree of invention from the skilled person.
- [50] As explained in the Panel Letter, regarding dependent claims 4, 6, 8, 10, 11, 12, 15, 17, 21, 23, 25 and 28 to 30, it was CGK for delivery personnel to use a portable device to scan bar codes from delivery notices and parcels and to relay this (and other linked) information to a central computer for updating a database of parcel tracking information. Senders and recipients then use tracking numbers to retrieve parcel tracking information (e.g. delivery status) from the central computer server via Internet-connected computers. Thus, these features in combination with the other features of the claims would not require the skilled person to be inventive.
- [51] Regarding dependent claim 18, it would be obvious to the skilled person that machine-readable and human-readable indicia on the same item would share information. A reason for including both on one item would be to make (the same) information available via different modes.
- [52] Regarding claim 19, the human-readable code read from the delivery notice and communicated to a computer is considered to be inherently alphanumeric; thus, claim 19 does not define any additional differences.
- [53] Regarding claims 26 and 31, it was CGK for the intended recipient to contact the delivery service via telephone for information. Thus, this feature in combination with the other features of the claims would not require the skilled person to be inventive.

Conclusions

- [54] The subject matter of claims 1 to 32 would have been obvious to the skilled person in view of D1 and the relevant CGK. Therefore, these claims do not comply with paragraph 28.3(b) of the *Patent Act*.

Distinctness and clarity

- [55] As noted in the Panel Letter, claim 26 contradicts claim 25 upon which it depends. Claim 25 states that query (delivery notice description) and response (reporting of information) are communicated via the Internet and claim 26 states they are communicated via a telephone connection. Although the description and drawings show that both modes of communication are possible alternatives for the overall

system, the claims are worded such that they define the same query and response being communicated using both modes in the same instance.

[56] Therefore, claims 25 and 26 do not comply with subsection 27(4) of the *Patent Act* or section 84 of the *Patent Rules*.

RECOMMENDATION OF THE BOARD

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

- Claims 1 to 32 define non-statutory subject matter and thus do not comply with section 2 of the *Patent Act*;
- Claims 1 to 32 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*; and
- Claims 25 and 26 are indefinite and unclear, 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

[58] 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, paragraph 28.3(b) or subsection 27(4) of the *Patent Act*, or with section 84 of the *Patent Rules*.

[59] 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 14th day of December, 2017