

Commissioner's Decision No. 1496  
Décision du commissaire n° 1496

TOPICS:    B-00 Indefiniteness  
              C-00 Adequacy or Deficiency of Description  
              O-00 Obviousness

SUJETS:    B-00 Caractère indéfini  
              C-00 Caractère adéquat ou inadéquat de la description  
              O-00 Évidence

Application No. 2577118  
Demande n° 2577118





IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2577118, 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 2577118, which is entitled “Multi-input access device and method of using same” and owned by Flash Seats, LLC. The outstanding defects indicated by the Final Action (FA) are that all the claims are obvious, the application does not sufficiently describe the invention, some claims are indefinite and the reference characters in one of the figures are wrong. 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 2577118, based on a previously filed Patent Cooperation Treaty application, is considered to have a filing date of August 12, 2005 and has been open to public inspection since February 23, 2006.
- [3] The invention relates to a system for selling and distributing tickets where paperless authentication may be used to gain access to a venue.

### Prosecution history

- [4] On July 20, 2016, an FA was issued pursuant to subsection 30(4) of the *Patent Rules*. The FA indicated the application on file to be defective on the grounds that claims 1 to 14 (i.e. all claims on file) are obvious, the application does not sufficiently describe the invention, claims 12 to 14 are indefinite, and the reference characters in figure 5 are incorrect.
- [5] In its January 9, 2017 response to the FA (RFA), the Applicant proposed an amended description and an amended set of 10 claims (the first proposed amendments), and submitted arguments for allowance of the application in this amended form.
- [6] The Examiner considered that the amendment to the claims would remedy the insufficient description and the indefiniteness defects, and that the amendment to the description would remedy the drawings defect, but was not persuaded that the

first proposed amendments would remedy the defect of obviousness. The rejection was not withdrawn.

- [7] Therefore, pursuant to subsection 30(6) of the *Patent Rules*, the first proposed amendments were not entered on file and the application was forwarded to the Board for review. On March 23, 2017, the Board forwarded a copy of the Summary of Reasons, with a letter acknowledging the rejection, to the Applicant. The Applicant responded on May 3, 2017 requesting the review to proceed.
- [8] 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 January 25, 2019 (the PR letter) presenting our analysis and rationale as to why, based on the record before us, we consider the subject matter of the claims on file (and of the first proposed amendments) not to comply with section 28.3 of the *Patent Act*, claims 12 to 14 on file not to comply with subsection 27(4) of the *Patent Act* or section 84 of the *Patent Rules*, and figure 5 in the application on file not to comply with section 82 of the *Patent Rules*.
- [9] The Applicant responded to the PR letter on February 22, 2019 (RPR) by proposing new amendments to the specification (the second proposed amendments), submitting further written arguments for allowance and requesting a hearing. The second proposed amendments consist of the same amendment to the description as in the first proposed amendments and new claims 1 to 14. These proposed claims are the same as the 14 claims on file except for changes in the wording of claims 11 to 14.
- [10] A hearing was held April 12, 2019, where the Applicant's position, as reflected in the written submissions, was further developed and argued.

## **ISSUES**

- [11] The issues addressed by this review are whether:
  - the claims on file define non-obvious subject matter, thus complying with section 28.3 of the *Patent Act*;
  - the application sufficiently describes and enables the invention, thus complying with subsection 27(3) of the *Patent Act*;

- claims 12 to 14 on file are definite and clear, thus complying with subsection 27(4) of the *Patent Act* and section 84 of the *Patent Rules*; and
- the reference characters in figure 5 comply with section 82 of the *Patent Rules*.

[12] Since, as explained below, we determined the application on file to be defective, we also addressed whether the second proposed amendments would constitute a necessary specific amendment under subsection 30(6.3) of the *Patent Rules*.

## LEGAL PRINCIPLES AND PATENT OFFICE PRACTICE

### Obviousness

[13] 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.

[14] In *Apotex Inc v Sanofi–Synthelabo Canada Inc*, 2008 SCC 61 at paragraph 67, 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 common general knowledge 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?



### **Sufficient and enabling description**

- [15] Subsection 27(3) of the *Patent Act* requires, among other things, a specification to correctly and fully describe an invention, and to enable its practice:

The specification of an invention must

- (a) correctly and fully describe the invention and its operation or use as contemplated by the inventor;
- (b) set out clearly the various steps in a process, or the method of constructing, making, compounding or using a machine, manufacture or composition of matter, in such full, clear, concise and exact terms as to enable any person skilled in the art or science to which it pertains, or with which it is most closely connected, to make, construct, compound or use it;

...

- [16] The courts (see e.g. *Teva Canada Ltd v Novartis AG*, 2013 FC 141 at paragraphs 336 to 344, 357 and 378, citing *Teva Canada Ltd v Pfizer Canada Inc*, 2012 SCC 60) have shown that this means a specification must:

- tell the skilled person what is the invention;
- tell the skilled person how the invention works; and
- enable the skilled person, using only its instructions, to produce the invention.

- [17] Assessing each of these requirements is a fact-specific determination.

### **Indefiniteness**

- [18] 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.

- [19] 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.

- [20] 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.

## Drawings

- [21] Subsections 82(9) and (10) of the *Patent Rules* require reference characters in the drawings to be meaningful:

- (9) Reference characters not mentioned in the description shall not appear in the drawings, and vice versa.
- (10) The same features, when denoted by reference characters, shall, throughout the application, be denoted by the same characters.

## ANALYSIS

### Obviousness

#### *The skilled person and the common general knowledge (CGK)*

- [22] In the PR letter, we accepted the definition from the FA of the skilled person as a person or team skilled in the fields of providing access to an event or venue, and of general-purpose computing.

- [23] The Applicant has not disputed this definition and we adopt it here as well.

#### *The CGK*

- [24] In the PR letter, we identified the following references as relevant:

- D1      US 2004/0006497      January 8, 2004      Nestor et al.

- D2      US 2003/0171960      September 11, 2003      Skinner
- D3      US 5999095      December 7, 1999      Earl et al.
- D4      WO 94/10658      May 11, 1994      Green
- D5:      US 2003/0093387      May 15, 2003      Nakfoor

[25] Agreeing with the FA, the PR letter identified the relevant CGK as including knowledge of:

- paper tickets for accessing events or venues, and problems associated with paper tickets;
- ticket transfer, such as the selling and reselling of tickets;
- use of a retrofit unit to modify existing access devices to perform additional functionality;
- the fact that modifying or fixing an existing device can be cheaper than purchasing a new device; and
- contactless cards (such as RFID) and contact cards (i.e. magnetic strip cards), bar codes, biometrics, authentication and turnstiles.

[26] The PR letter indicated that support for the first point exists in the background sections of the present application (paragraphs 5 to 8), D1 (paragraphs 2 to 6), D2 (paragraphs 2 to 6) and D5 (paragraphs 3 to 6); support for the second point exists in the background sections of the present application (paragraphs 5 to 8), D1 (paragraphs 2 to 6) and D5 (paragraphs 3 to 6); and support for the third point exists in D3 (column 3) and D4 (page 5).

[27] The Applicant did not dispute the identification of the CGK prior to the PR letter, but in the RPR and at the hearing, disputed the third and fourth points, contending that they were too broadly generalized.

[28] The Applicant contended that D3 and D4 do not show examples of the use of a retrofit unit to modify existing access devices to perform additional functionality and that in any case, the cited statements of these references are insufficient to prove any CGK. Furthermore, submitted the Applicant, nothing on record shows the fourth point.

[29] Two principles or concepts are specifically missing from the CGK, contended the Applicant. The first is the broad concept of retrofitting, i.e. the concept that any device in any field can be retrofitted to fulfil any purpose and derive any advantage. The second is the concept of the superiority of repair versus replace,

i.e. the concept that modifying or repairing an existing device is always cheaper than replacing the device.

- [30] However, although the Applicant did not consider the CGK to include the *concept* of retrofitting an access device in this field, it submits that the CGK does include the surrounding constellation of ideas needed to implement the concept. That is to say, that the CGK includes all the knowledge needed by the skilled person to carry out the retrofitting in this case once told to do so.
- [31] We accept the details of implementing the retrofit as CGK. Since the first, second and fifth above listed points identifying the relevant CGK were never in dispute, we adopt them here as well.
- [32] As for the third and fourth points, our view is that they are valid, though not to the breadth that the Applicant has taken them to imply. It is not CGK that all devices can be retrofitted for all purposes, or that it is always cheaper to modify a device than to replace it. We agree that in some cases, the skilled person would be motivated to pursue a solution other than retrofitting, or would not expect retrofitting to be viable. The Applicant provided an example in the RPR: it can sometimes be cheaper to purchase a replacement mass-produced consumer appliance than to modify or fix an existing one. It would depend on the circumstances of a given situation, whether there were other factors or motivations suggesting to the skilled person that retrofitting is not a viable option.
- [33] We nonetheless consider it to be CGK that a device *can* be retrofitted or upgraded instead of replaced. It is also CGK that it *can* be advantageous (e.g. less costly) to modify or repair an existing device instead of replacing it. As general concepts, these tools exist in the skilled person's toolbox, to at least consider, and to exercise when logical to do so. This is consistent with the identification of the skilled person above and with the notion of the skilled person being the addressee of the application and expected to practise the disclosed and claimed invention.

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

[34] Independent claims 1 and 7 on file are respectively directed to a system and a method. Both involve a paper-ticket-based access device retrofitted to also accept paperless authentication.

[35] Claim 1 is provided below as a reference:

1. An access system for allowing access to a venue, said access system comprising:

a modified access device comprising:

(a) an existing access device which allows access to a venue based on data associated with a paper ticket, said data being paper-based authentication data and

(b) a retrofit unit that modifies the existing access device to communicate with an access computer system to accept paperless authentication data identifying a patron having access to the venue, wherein said modified access device verifies said patron's access to said venue based on said paperless authentication data and accommodates paper tickets.

[36] Agreeing with the FA, the PR letter identified the inventive concept for each of the claims on file as:

a modified access device comprising:

an existing access device allowing access to a venue based on paper-based authentication data associated with a paper ticket;  
and

a retrofit unit modifying the existing access device to communicate with an access computer system to accept paperless authentication data identifying a patron having access to the venue,

wherein the modified access device verifies said patron's access to said venue based on the paperless authentication data but also accommodates paper tickets.

- [37] The Applicant did not dispute this definition and we adopt it here as well, but wish to comment on the term “retrofit unit”. The application does not disclose the structure of the retrofit unit or how it modifies the access device to carry out its claimed functionality. The only discussion of the retrofit unit appears in paragraph 42 of the description:

Other embodiments provide a retrofit module to modify existing access devices, such as turnstiles or scanners, to accept paperless tickets and authentication data. In an embodiment, a retrofit system allows a turnstile to communicate with an access computer system to allow admission to a venue using paperless and/or printed forms of authentication.

- [38] Thus, beyond providing to the access device the functionality of being able to communicate with an access computer system to accept paperless authentication, the only limitation on this “unit” is a purely conceptual one. That is to say, that the access device has somehow been “retrofitted” to enable this functionality, not built already capable of this functionality.

*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*

- [39] As explained in the PR letter, we consider D1 and D5 to be the most relevant cited references.

Both D1 (abstract; paragraphs 10, 11, 28, 33 to 37 and 101) and D5 (abstract; paragraphs 17 and 24 to 26) disclose a system for controlling access to a venue, the system comprising a device in communication with a computer system and able to accept paperless authentication data from a patron identifying the patron as having access to the venue. In both systems the device can also accommodate paper-based authentication data, such as from a paper ticket.

Neither reference, however, suggests an access control system based on paper tickets that has been modified, by a retrofit unit, to also accept paperless authentication data.

- [40] The Applicant did not dispute this characterization of the difference between the state of the art and the inventive concept and we adopt it here as well.

*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*

- [41] In the PR letter, we indicated the difference to be an obvious step based on the CGK of the possibility of retrofitting existing systems, of the potential desirability of doing so, and of the means and techniques for retrofitting an existing access device to also accept paperless authentication.
- [42] As alluded to above, the Applicant disagreed, contending that the concepts of retrofitting access devices and the desirability of doing so are neither CGK nor prior art. The Applicant argued in the RPR and at the hearing that there would be no motivation for the skilled person to retrofit the existing access device.
- [43] Although the limitations of paper-ticket-based access devices are CGK and access devices accepting paperless authentication are in the prior art (see e.g. D1 or D5), the Applicant's position is that it discovered the problem of "transition"—the necessity to accommodate both paper tickets and paperless authentication during the transition interval—and provided an inventive solution. As the RPR explained:

As discussed above, the problem addressed by the inventors was not merely a change from the use of paper-based authentication data to the use of paperless authentication data, but instead a "*transition away from paper tickets*", particularly applicable in the context of access systems for allowing access to a venue involving an interval during which both capabilities are required.

...

Moreover, there is no evidence of record that "retain[ing] backward compatibility with legacy technology" was a recognized problem in the relevant context, and thus the above assertion is necessarily an instance of "presupposing that the specific problem addressed by the inventors was recognised in the prior art", which necessarily involves "adopting an improper 'hindsight' perspective" contrary to the guidance of MOPOP 15.02.02e.

...

Thus, regardless of the simplicity of the practical application of the idea of combining a retrofit unit to modify an existing paper-based access device to accept paperless authentication data, it remains the case that at least that underlying idea is meritorious and involves an inventive step, at least

inasmuch as the practical application thereof provides a solution to the problem of facilitating a *transition away from* paper tickets in a venue access system, to which the cited documents and common general knowledge would not have led a skilled person directly and without difficulty. [Emphasis in original.]

- [44] Our view is that the CGK limitations of paper-ticket-based access devices would motivate the skilled person to find and implement a solution, such as one of the paperless-authentication-based devices disclosed by D1 or D5. Upon implementation of a paperless-authentication-based device, the skilled person would inevitably encounter the “transition” problem where there were still paper-ticket holders needing access during or shortly after the implementation. Logically, the skilled person would seek some solution that accommodated both paper tickets and paperless authentication, at least during the transition interval.
- [45] One such solution that would logically present itself to the skilled person would be to retrofit the existing access device to also accommodate paperless authentication. There do not appear to be any suggestions that retrofitting would not be a viable option for access devices in this field. Also, as remarked above, all structural and functional modifications needed to retrofit an existing paper-ticket-based access device to also accept paperless authentication are necessarily CGK.
- [46] Since, as noted above, the paperless-authentication-based devices of D1 and D5 can also accommodate paper-based authentication data, the use of a “retrofit unit” in the inventive concept appears to represent only a conceptual difference over D1 and D5, and the concept of retrofitting is a known design choice.

#### *Conclusion on obviousness*

- [47] We consider that the subject matter of claims 1 to 14 on file would have been obvious to the skilled person in view of either D1 or D5, having regard to the CGK. Therefore, the claims do not comply with section 28.3 of the *Patent Act*.

#### **Sufficient and enabling description**

- [48] The description and drawings do not indicate what the retrofit unit is, how it works, how it attaches to and communicates with the existing access device, or how it modifies the existing access device.



- [49] On the other hand, as explained above, the CGK includes all the knowledge needed by the skilled person to carry out the retrofitting in this case.
- [50] Accordingly, we consider that the skilled person would be enabled—by their CGK—to produce the invention of the claims on file.
- [51] We therefore view the specification on file as complying with subsection 27(3) of the *Patent Act*.

### **Indefiniteness**

- [52] In the PR letter, we preliminarily agreed with Examiner’s characterization of claims 12 to 14, and considered them to be indefinite and unclear:

As remarked in the FA (page 6), claims 12 to 14 on file depend upon the “access device of claim 11,” but claim 11 recites an “access system.”

The FA also noted that claim 14 on file states that the access device may comprise a retrofit unit: claim 1, upon which claim 14 ultimately depends, already defines the modified access device as comprising a retrofit unit.

- [53] The Applicant did not dispute this characterization or reasoning and we adopt them again here.
- [54] Accordingly, we consider claims 12 to 14 on file not to comply with subsection 27(4) of the *Patent Act* or section 84 of the *Patent Rules*.

### **Drawings**

- [55] We explained in the PR letter:

We observe that reference characters 208, 220 and 226 are missing from the description on file and that reference characters 216 and 218 are used to denote different features in the description than they do in figure 5. Accordingly, we preliminarily agree that figure 5 (in the application on file) does not comply with section 82 of the *Patent Rules*.

- [56] The Applicant did not dispute this reasoning and we adopt it here as well.

### **Proposed description and claims**

- [57] As stated above, the second proposed amendments include the same amendment to the description as the Applicant had proposed in the RFA. Thus, as we had considered in regard to that proposal, we consider that the proposed amendment to the description would enable figure 5 to comply with section 82 of the *Patent Rules* and not interfere with the specification's compliance with subsection 27(3) of the *Patent Act*.
- [58] The second proposed amendments also include wording changes to claims 11 to 14 (from how they read on file) that would enable them to comply with subsection 27(4) of the *Patent Act* and section 84 of the *Patent Rules*. Our view is that the defect of obviousness would remain, though, as the proposed amendments would not alter the above identifications of the skilled person, the CGK or the inventive concept.
- [59] Accordingly, our view concerning obviousness also applies to the second proposed amendments. It follows that the second proposed amendments are 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 14 are obvious and do not comply with section 28.3 of the *Patent Act*;
  - claims 12 to 14 on file are indefinite and unclear, and do not comply with subsection 27(4) of the *Patent Act* or section 84 of the *Patent Rules*; and
  - the reference characters in figure 5 cause it to contravene section 82 of the *Patent Rules*.

Leigh Matheson  
Member

Marcel Brisebois  
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 do not comply with section 28.3 of the *Patent Act*, claims 12 to 14 do not comply with either subsection 27(4) of the *Patent Act* or section 84 of the *Patent Rules*, and figure 5 does not comply with section 82 of the *Patent Rules*.
- [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 19<sup>th</sup> day of September , 2019