

Commissioner's Decision #1482
Décision de la Commissaire #1482

TOPIC: O00 (Obviousness)
SUJET: O00 (Évidence)

Application No.: 2,637,716
Demande n°.: 2 637 716

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,637,716, 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.

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INTRODUCTION

[1] This recommendation concerns the review of rejected patent application number 2,637,716, which is entitled “Systems and methods for use in electronic processing of passengers and baggage at security check points” and is owned by United Parcels Service of America, Inc. The outstanding defect to be addressed is whether the subject-matter of the claims on file would have been obvious. A review of the rejected application has been conducted by the Patent Appeal Board (“the Board”) pursuant to paragraph 30(6)(c) of the *Patent Rules*. As explained in more detail below, our recommendation is that the application be refused.

BACKGROUND

The application

[2] Patent application 2,637,716 was filed in Canada on August 9, 2002 and was opened to public inspection on August 21, 2003.

[3] The claimed subject matter of the application relates to electronic systems that can be implemented as security measures in the transportation industry to aid in processing passengers through security checkpoints.

Prosecution history

[4] On June 2, 2016, a Final Action (FA) was written pursuant to subsection 30(4) of the *Patent Rules*. The FA explained that the subject-matter of all claims on file would have been obvious, contrary to section 28.3 of the *Patent Act*.

[5] In a response to the FA (RFA) dated November 21, 2016, the Applicant submitted an amended claim set (proposed claims set-1) that, according to the Applicant, complies with the *Patent Act* and *Patent Rules*. The Applicant provided arguments as to why the subject-matter of the proposed claims set-1 was patentable and not open to objection for the reasons outlined in the FA.

- [6] As the Examiner was not persuaded by the Applicant's arguments, the application and an accompanying Summary of Reasons (SOR) were forwarded to the Board for review. The SOR maintained that the claims on file would have been obvious, contrary to section 28.3 of the *Patent Act*. The SOR also concluded that the maintained defect was not overcome by the proposed claims set-1. In a letter dated January 11, 2017, the Board forwarded the Applicant a copy of the SOR.
- [7] The present 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 preliminary review letter dated November 22, 2018 (the PR 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 would have been obvious in view of a newly cited prior art document. Further, we expressed the view that the claims of the proposed claims set-1 do not constitute a "necessary" amendment under subsection 30(6.3) of the *Patent Rules* because our preliminary view with regard to the obviousness of the subject-matter of the claims on file would not have changed if the proposed claims set-1 had been adopted. The PR Letter also offered the Applicant the opportunity to make further written submissions and to attend an oral hearing in response to the Panel's preliminary review.
- [8] On December 13, 2018, the Applicant indicated that an oral hearing was no longer desired and that written submissions as well further amended claims would follow.
- [9] On December 19, 2018, the Applicant provided written submissions with respect to the PR Letter (the RPR Letter). In the same letter, the Applicant also submitted a second amended claims set (the proposed claims set-2).

ISSUES

[10] In view of the above, a single issue is addressed in this review: whether the subject-matter of the claims on file would have been obvious, contrary to section 28.3 of the *Patent Act*.

LEGAL PRINCIPLES AND PATENT OFFICE PRACTICES

Purposive construction

[11] Essential elements are identified through a purposive construction of the claims. The exercise is conducted from the standpoint of a person skilled in the art by considering the whole of the disclosure, including the specification and drawings: *Free World Trust v Électro Santé Inc*, 2000 SCC 66 [*Free World*]; *Whirlpool Corp v Camco Inc*, 2000 SCC 67 at paras 49(f) and (g) and 52 [*Whirlpool*]. Similarly, according to the *Manual of Patent Office Practice [MOPOP]* §13.05, the first step in the construction of the claims of a patent application is to identify the person of ordinary skill in the art (POSITA) and the relevant common general knowledge (CGK). The next step is to identify the problem addressed by the inventors and the solution disclosed in the application. Essential elements can then be identified as those elements of the claims that are required to achieve the disclosed solution.

Obviousness

[12] Section 28.3 of the *Patent Act* sets out the statutory requirement that the claimed subject-matter must not have been obvious to the POSITA:

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.

[13] In *Apotex Inc v Sanofi-Synthelabo Canada Inc*, 2008 SCC 61 [*Sanofi*] at para 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?

[14] Additionally, *Sanofi* instructs at para 71 that one may look to the actual course of conduct followed by the inventors:

For example, if the inventor and his or her team reached the invention quickly, easily, directly and relatively inexpensively, in light of the prior art and common general knowledge, that may be evidence supporting a finding of obviousness, unless the level at which they worked and their knowledge base was above what should be attributed to the skilled person.

ANALYSIS

Purposive construction

[15] In the PR Letter, we expressed the view that in this case it is unnecessary to formally distinguish the essential elements from the non-essential ones through purposive construction because all elements of the claims in combination are considered in the obviousness analysis. In addition, we considered that the claim terminology would

be clear to the POSITA (defined below in the obviousness analysis section) and that the scope of the claims could be readily ascertained. The Applicant acknowledged the above approach on the second page of the RPR Letter and did not indicate disagreement with it.

Obviousness

[16] We consider that independent claims 1 and 2 are representative of the subject-matter of the claims on file and read as follows:

1. A system for use in evaluating individuals prior to entrance into a secure environment, the system comprising memory for storing instructions and a processor configured to implement the instructions so that the system is adapted for:

- (a) receiving data records associated with a plurality of individuals attempting to gain access to the secure environment, the data records containing information related to the plurality of individuals;
- (b) storing the data records in memory;
- (c) allowing a user to define search criteria that is used to identify individuals that satisfy the search criteria;
- (d) storing the search criteria in memory;
- (e) using the search criteria to search the data records to identify a set of search results that comprises each individual of the plurality of individuals that satisfies the search criteria;
- (f) displaying the set of search results to the user; and
- (g) allowing the user to select one or more particular individuals identified in the set of search results for further investigation, wherein the system is further configured for:
 - in response to the one or more particular individuals being selected by the user at the Step (g), indicating that the one or more particular individuals are to be routed to an investigation location;
 - printing a list of the individuals selected by the user, the list comprising information associated with each selected individual from the data record for the individual to thereby provide a manifest of the individuals selected for investigation;
 - indicating that access to the secure environment is allowed to any of the plurality of individuals that were not selected by the user for investigation at the Step (g); and
 - performing the Steps (a) through (g) prior to the plurality of individuals arriving at the entrance to the secure environment.

2. A system for use in evaluating individuals prior to entrance into a secure environment, said system comprising:

a processing computer system comprising:

- at least one processor configured, prior to a plurality of individuals arriving at an entrance to the secure environment located at a facility, to:
 - receive search criteria defined by a user, the search criteria to be used to identify individuals that satisfy the search criteria;
 - store the search criteria;
 - access data records associated with the plurality of individuals attempting to gain access to the secure environment from memory, each of said data records comprising status information, the status information indicating a hold status;
 - search the data records using the search criteria to identify a set of search results comprising each individual of the plurality of individuals that satisfies the search criteria;
 - display the set of search results to the user;
 - receive a selection of one or more particular individuals identified in the set of search results by the user for further investigation; and
 - alter the hold status in each data record associated with individuals not selected by the user to a release status; and
- the at least one processor configured, in response to the plurality of individuals arriving at the entrance of the secure environment, to:
 - access the data records associated with the plurality of individuals from the memory;
 - instruct the one or more particular individuals that have the hold status to be routed to an investigation location; and
 - instruct any of said plurality of individuals that have the release status to be routed to the secure environment.

[17] Dependent claims 3 and 4 specify that each of the data records includes status information associated with each individual (i.e. hold or release status). Dependent claim 5 specifies that the system is adapted for allowing the user of the system to enter and store information concerning individuals investigated by the user. Dependent claim 6 specifies that there is a plurality of possible users for the system wherein each is having a unique identification code and that the system is adapted for allowing each user to define individual search criteria and storing the search criteria along with the user's identification code.

Identify the POSITA and the relevant CGK

[18] In the PR Letter, we considered the assessments of the POSITA and the relevant CGK presented in the FA. We also noted that, in the RFA, the Applicant did not express disagreement with regard to said assessments.

[19] We expressed the view that the POSITA is a team comprising technologists and operations managers from fields where travellers, baggage, parcels, etc. are processed for security or inspection purposes and further considered, having noticed that the claimed subject-matter is limited to the processing of individuals, that the POSITA is particularly skilled and knowledgeable with regard to security measures related to individuals and their implementation in different contexts, including aviation security, and less so with regard to fields related to parcels.

[20] In the PR Letter, we listed the following elements as CGK:

- knowledge of the advantages which can be gained by using computers, modern communications infrastructure, modern electronics, etc. to automate or otherwise facilitate many of the steps in administrative procedures;
- knowledge of computer systems capable of receiving, storing, searching, inputting and outputting data;
- knowledge that computer systems are useful to automate and assist screening steps based on a database and criteria determined by the user;
- knowledge of how to configure computer systems with the requisite programming instructions for accepting inputs, searching certain databases, extracting information from certain databases and displaying/identifying the screened results obtained from the extracted data; and
- knowledge of the security measures and administrative procedures to be

taken before boarding an airplane with individuals, including general procedures for profiling/screening passengers on predetermined criteria as well as their advantages over procedures wherein all passengers are fully investigated (e.g., effectiveness, efficiency, practicality and economy of resources).

[21] As there has been no disagreement expressed by the Applicant, we therefore adopt for the purpose of this review the above identifications of the POSITA and the relevant CGK.

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

[22] In the PR Letter, we identified the inventive concept of the claims on file as systems that allow security to perform electronic searches on data stored for passengers and attendees prior to entrance into a secure environment in order to select individuals that should be further scrutinized before their release from the security checkpoint. We also restated that the combination of all elements of the claims would be considered in our obviousness assessment.

[23] Again, the Applicant did not dispute this approach and we adopt it here.

Differences 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

[24] Having reviewed the content of the prior art documents cited in the FA and also having considered the following additional document that came to our attention during the preliminary review, we expressed in the PR Letter the opinion that said additional document is the closest and most relevant prior art to the claimed subject-matter and that it epitomises the “state of the art” at the claim date:

- “Security of Checked Baggage on Flights Within the United States; Proposed Rule”, Federal Register, Vol. 64, No. 74, April 19, 1999 published by the

U.S. Federal Aviation Administration (FAA) of the Department of Transportation [*FAA Notice*].

[25] The *FAA Notice* describes on pages 19220 to 19223 a computer-assisted passenger screening (CAPS) system used in U.S. airports. CAPS is an automated passenger profiling system that, prior the entrance of individuals into a secure environment, uses existing electronic information from the airline reservation systems to separate passengers into a very large majority who present no security risk and a small minority (known as “selectees”) who merit more intense scrutiny prior boarding an airplane. The automated system “scores” passengers according to a set of weighted criteria to determine which should be subjected to additional investigations by security personnel, including the selectee’s checked baggage. The FAA would periodically review the CAPS system and its profiling factors to assure that they continue to be reasonable predictors of threat. The system requires that each passenger be subjected to security inspection through CAPS prior to release. As with manual profiling, the purpose of automated profiling is to exclude from the additional security measures the great majority of passengers who are very unlikely to present any threat and, conversely, to identify passengers to whom heightened security measures should be applied. Unlike manual profiling, automated profiling by CAPS offers numerous advantages, including elimination of the human biases, greater sophistication, speed, accuracy (i.e., not prone to human errors in profiling) and flexibility.

[26] In the PR Letter, we expressed the view that the POSITA would understand that the CAPS system comprises memory for storing instructions and a processor configured to implement the instructions so that the system is adapted to:

- a) receive data records associated with a plurality of individuals attempting to gain access to the secure environment, the data records containing information related to the plurality of individuals and status information indicating a hold status;
- b) store the data records in memory;

- c) allowing a user to define search criteria that is used to identify individuals that satisfy the search criteria;
- d) store the search criteria in memory;
- e) use the search criteria to search the data records to identify a set of search results that comprises each individual of the plurality of individuals that satisfies the search criteria;
- f) display the set of search results to the user; and
- g) allowing the user to select one or more particular individuals identified in the set of search results for further investigation, wherein the system is further configured to:
 - i) alter the hold status in each data record associated with one or more selected particular individuals to a “selectees” status and alter the hold status in each data record associated with individuals not selected by the user to a “release” status;
 - ii) indicate that the one or more selected particular individuals are to be routed to an investigation location; and
 - iii) indicate that access to the secure environment is allowed to any of the plurality of individuals that were not selected by the user for investigation.

[27] On that basis, we expressed the view that the POSITA would consider that the main differences between the disclosure of the *FAA Notice* and the subject-matter of independent claims 1 and 2 are the following:

- With respect to claim 1, the *FAA Notice* does not disclose that the CAPS system prints a manifest of the individuals selected for further investigation and information related to the individuals; and
- With respect to claim 2, the *FAA Notice* does not disclose that the CAPS system instructs directly (i.e., not through security personnel) the individual to be routed to a given location on the basis of a “hold” or “release” status.

[28] The Applicant did not dispute our identification of the differences and we adopt it here.

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?

[29] In the PR Letter, we offered the following analysis as to why it was our preliminary view that the subject-matter of claims 1 to 6 on file would have been obvious at the claim date to the POSITA taught by the *FAA Notice* in view of the relevant CGK:

With regard to inventive ingenuity necessary to support a valid patent, the Exchequer Court of Canada in *Canadian Gypsum Co v Gypsum, Lime & Alabastine, Canada Ltd* [1931] Ex CR 180 stated at para 12 that the required inventive ingenuity may be found in the underlying idea and/or in the method of carrying it into practice [sic] the following:

“[T]he inventive ingenuity necessary to support a valid patent may be found in the underlying idea, or in the practical application of that idea, or in both. It may happen that the idea or conception is a meritorious one, but that once suggested, its application is very simple. Again, it may be that the idea is an obvious one, but that ingenuity is required to put it into practise. Or, again, the idea itself may have merit and the method of carrying it into practise also requires inventive ingenuity”.

Having reviewed the instant application as a whole, it is our view that the underlying general idea of a system that allows security to perform electronic searches on data stored for passengers and attendees prior to entrance into a secure environment in order to select individuals that should be further scrutinized before their release from the security checkpoint is merely an obvious computerized implementation of the applicable and known security procedures and also an idea that was already implemented at the claim date in U.S. airports as the CAPS system.

With regard to putting into practice a system for use in evaluating individuals prior to entrance into a secure environment, the instant application does not disclose the implementation details and entirely relies on the ordinary skills and the relevant CGK possessed by the POSITA. Further, we consider that there is no indication or suggestion in the specification or the CGK that ingenuity would be required from the POSITA to put into practice the claimed subject-matter.

Unexpected benefits or advantages associated with the claimed subject-matter may also indicate inventive ingenuity but we are of the view that the POSITA would not consider that the claimed subject-matter includes any benefit or advantage associated with the

claimed automated security system beyond those expected and commonly known in fields where individuals are processed for security.

Taken as a whole, the foregoing considerations do not support inventiveness for the claimed system.

Turning now to the noted differences between the matter cited as forming part of the “state of the art” and claimed subject-matter and whether such differences constitute steps which would have been obvious to the POSITA, the Federal Court of Appeal reminded at para 65 of *Bristol-Myers Squibb Canada Co v Teva Canada Ltd*, 2017 FCA 76 that the instant step of the obviousness analysis is concerned with whether bridging the difference between the prior art and a second point requires inventiveness:

It may be helpful to keep in mind that the obviousness analysis asks whether the distance between two points in the development of the art can be bridged by the Skilled Person using only the common general knowledge available to such a person. If so, it is obvious. The first of those points is the state of the prior art at the relevant date. References in the jurisprudence to “the inventive concept”, “the solution taught by the patent”, “what is claimed” or simply “the invention” are attempts to define the second point.

Our preliminary view is that the difference between the disclosure of the *FAA Notice* and the independent claims 1 and 2 would have been obvious to the person skilled in the art and would not require any degree of invention.

Regarding the first identified difference with respect to claim 1, namely printing a manifest of the individuals selected for further investigation and information related to the individuals, the POSITA would understand that the CAPS system described in the *FAA Notice* comprises, although not explicitly stated, means to display the information related to the individuals selected for further investigation. In our view, obvious design options of such feature include a printed or a searchable electronic manifest.

Regarding the second identified difference with respect to claim 2, namely instructing directly the individual to be routed to a given location on the basis of a “hold” or “release” status, the POSITA would understand that the CAPS system described in the *FAA Notice* comprises, although not explicitly stated, means to instruct the individual to be routed to a given location on the basis of whether the individual is a “selectee” or not. It [*sic*] our view that such difference pertains to an obvious design option and that selecting a manner of instructing the individual to be routed would not require any degree of invention from the POSITA.

Having also considered dependent claims 3 to 6, we consider that the CAPS system includes the status information in the data records (claim 3) and means to allow the user to alter the status data of each individual following the investigation (claim 4). Further, we consider that it would be an obvious implementation to the POSITA, if not already available for the CAPS system, to allow the user of the system to enter and store

information concerning the individuals further investigated, notably the answers offered to the security personnel and a record of the investigation (claim 5). Finally, we consider that it would not require any degree of invention to adapt the CAPS system, as an obvious design option, to allow the users to define individual search criteria and storing the search criteria along with the users' identification codes as the CAPS system already allows periodical review of its profiling criteria (claim 6).

[30] Further, we expressed in the PR Letter the view that the claims of the proposed claims set-1 do not constitute a "necessary" amendment under subsection 30(6.3) of the *Patent Rules* because our preliminary view with regard to the obviousness of the subject-matter of the claims on file would not have changed if the proposed claims had been adopted:

With the RFA, the Applicant submitted a proposed claims set containing claims 1 to 7 wherein step (g) of the proposed independent claim 1 is amended to recite "generating an electronic list of the individuals selected by the user, the electronic list comprising information associated with each selected individual from the data record for the individual to thereby provide a manifest of the individuals selected for investigation, the electronic list being configured to have associated with each of the individuals thereon an electronics notes field" and "capturing electronic notes made by the user regarding a further investigation of one or more of the individuals on the electronic list, the electronic notes being associated with the investigated one or more of the individuals and being electronically archived in the memory, electronically searchable, and electronically accessible for subsequent reports".

The proposed claim set also comprises a new dependent claim 3 that reads as follows:

3. A system accordingly to Claim 2, wherein the at least one processor is configured, prior to the plurality of individuals arriving at the entrance to the secure environment, to:
 - generate an electronic list of the individuals electronically selected by the user, the electronic list comprising information associated with each selected individual from the data record for the individual to thereby provide a manifest of the individuals selected for investigation, the electronic list being configured to have associated with each of the individuals thereon an electronics notes field; and
 - capture electronic notes made by the user regarding a further investigation of one or more of the individuals on the electronic list, the electronic notes being associated with the investigated one or more of the individuals and being electronically archived in the memory, electronically searchable, and electronically accessible for subsequent reports.

We note that there is a correspondence between the proposed claims and the claims on file, that the proposed claims do not broaden the scope of the corresponding claims on file and do not necessitate another prior art search. Accordingly, the proposed claims could be considered for amendment under subsection 30(6.3) of

the *Patent Rules* if it is determined that they overcome the defects noted above with regard to the claims on file, and do not introduce another defect. For these reasons, we have provided our preliminary views on these claims as well.

We have presented our preliminary view that the subject-matter of claims 1 to 6 on file would have been obvious at the claim date to the POSITA taught by the *FAA Notice* in view of the relevant CGK.

In our opinion, the only significant difference between claim 1 on file and proposed claim 1 is that in step (g) of the proposed claim 1 the system is further configured to generate an electronic manifest comprising an electronic note field associated with each individual instead of a printed one and to allow capturing electronic notes, including notes regarding a further investigation. The new proposed dependent claim 3 essentially adds the same features to proposed claim 2.

We reiterate our preliminary view that generating a searchable electronic list of selected individuals and allowing the user of the system to enter and store information concerning the individuals further investigated, including the answers offered to the security personnel and a record of the investigation, fail to recite an inventive step in view of the CAPS system disclosed in the *FAA Notice* and the relevant CGK as they would be obvious design options. We further consider that it would be an obvious implementation to the POSITA of the above features to configure the electronic list to have associated with each individual an electronic note field, wherein the electronic note field allows capturing electronically searchable notes made by the user regarding a further investigation of one or more of the individuals on the electronic list, and the electronic notes are electronically archived in the memory, electronically searchable, and electronically accessible for subsequent reports.

[31] The RPR Letter stated that the Applicant's position regarding patentability of the claims currently on file has been set out in detail in previously filed responses, a position that we already considered in the PR Letter. Therefore, in absence of further submissions with respect to the claims on file and for the reasons expressed in the passage cited above, we consider that the subject-matter of the claims on file would have been obvious, contrary to section 28.3 of the *Patent Act*.

ANALYSIS OF THE PROPOSED CLAIMS SET-2

[32] As mentioned above, the Applicant submitted with the RPR Letter the proposed claims set-2 containing claims 1 to 4 wherein proposed independent claim 1 is amended to recite the following:

1. A processing computer system comprising:
 - at least one processor configured, prior to a plurality of individuals arriving at an entrance to the secure environment located at a facility, to:
 - (a) receive, from an interface device associated with a user, search criteria defined by the user, the search criteria to be used by the at least one processor to identify individuals that satisfy the search criteria;
 - (b) store the search criteria;
 - (c) access data records associated with the plurality of individuals attempting to gain access to the secure environment from memory, each of said data records comprising status information, the status information indicating a hold status;
 - (d) search the data records using the search criteria to identify a set of search results comprising each individual of the plurality of individuals that satisfies the search criteria;
 - (e) display, using the interface device associated with the user, the set of search results to the user;
 - (f) receive, from the interface device associated with the user, a selection of one or more particular individuals identified in the set of search results by the user for further investigation; and
 - (g) alter the hold status in each data record associated with individuals not selected by the user to a release status; and
 - the at least one processor configured, in response to the plurality of individuals arriving at the entrance of the secure environment, to:
 - (a) access the data records associated with the plurality of individuals from the memory;
 - (b) instruct the one or more particular individuals that have the hold status to be routed to an investigation location; and
 - (c) instruct any of said plurality of individuals that have the release status to be routed to the secure environment.

[33] Proposed dependent claim 2 specifies that the processor is configured to create a list of the individuals selected and information associated with each individual from the data record, i.e., a manifest of the individuals selected for investigation. Proposed dependent claim 3 specifies that the processor is configured to receive information entered by the user concerning each individual investigated and to store the information in the memory, i.e., a record of the investigation. Proposed dependent claim 4 specifies that there is a plurality of possible users for the system wherein each is having a unique identification code and that the system is adapted for allowing each user to define individual search criteria and storing the search criteria along with the user's identification code.

[34] We note that there is a clear correspondence between the proposed claims set-2 and the claims on file, that the proposed claims set-2 do not broaden the scope of the corresponding claims on file and do not necessitate another prior art search. Accordingly, the proposed claims set-2 could be considered for amendment if it is determined that they overcome the defects noted above with regard to the claims on file and do not introduce another defect.

[35] In the RPR Letter, the Applicant submitted the following with regard to the inventiveness of the proposed claims set-2 in view of the *FAA Notice*:

As noted above, proposed new claim 1 differs from the known prior art references (including the *FAA Notice*) in at least the following respects:

- proposed new claim 1 explicitly defines that the processor is configured to perform a defined set of operations “prior to a plurality of individuals arriving at an entrance to the secure environment located at a facility”, and another set of operations “in response to the plurality of individuals arriving at the entrance of the secure environment”.
- each individual is initially assigned a “hold” status (subclause (a)), and this status is changed by the processor (i.e. automatically) to a “release” status for each individual that is not selected for further investigation (subclause (g)).

Applicant submits that these features, in combination with the other elements of the claim, would not have been obvious at the claim date to a POSITA having regard to cited prior art and the CGK.

In particular, the *FAA Notice* does not appear to explicitly distinguish between actions that are taken “prior to a plurality of individuals arriving at an entrance to the secure environment located at a facility”, and those that are taken afterwards. Based on the relevant CGK, the POSITA may presume that at least some functions of a Computer Assisted Passenger Screening (CAPS) system *could* be performed prior to individuals arriving at an entrance to the secure environment. However, the *FAA Notice* does not describe the timing of CAPS operations, and neither the CGK nor the *FAA Notice* teaches or fairly suggests the particular timing defined in proposed new claim 1. For example, the POSITA may reasonably conclude that the screening and selection operations of the CAPS system should be performed *after* an individual arrives at the entrance to the secure

environment, because this would prevent unnecessarily screening individuals who do not arrive.

In contrast, proposed new claim 1 defines that the plurality of individuals are screened, and the status of each non-selected individual altered to a “release” status, “prior to [the] plurality of individuals arriving at an entrance to the secure environment”. In response to the plurality of individuals arriving at the entrance to the secure environment, proposed new claim 1 defines that individuals having a hold status are “routed to an investigation location”, while individuals having a release status are routed to the secure environment.

Similarly, the FAA Notice does not appear to describe the manner in which individuals are identified as being selected for further investigation or not. Based on the relevant CGK, the POSITA might reasonably presume that this identification *could* be indicated by way of a selected field in data associated with an individual. However, the FAA Notice does not provide any such details, and neither the CGK nor the FAA Notice teaches or fairly suggests the particular operations defined in proposed new claim 1. In particular, the CGK and FAA Notice do not disclose assigning a hold status to all individuals, and then altering this status to “release” for those individuals who are not selected for further investigation, as defined in the proposed new claim 1.

For at least the foregoing reasons, proposed new claims 1-4 are believed to comply with Section 28.3 of the *Patent Act*. [emphasis in the original]

[36] With respect to the submission that neither the CGK nor the *FAA Notice* teaches or fairly suggests that the particular timing for the screening step is “prior to a plurality of individuals arriving at an entrance to the secure environment located at a facility” as recited in independent claim 1, we respectfully disagree. We are of the view that it would not have been reasonable for the POSITA to conclude from the *FAA Notice* that the screening and selection operations of the CAPS system is to be performed *after* an individual arrives at the entrance to the secure environment. The POSITA knows the security measures and administrative procedures to be taken before boarding an airplane with individuals, including general procedures for profiling/screening passengers (see the CGK described above) and thus would understand that security screening begins at check-in, prior to arriving to the secure boarding area. Airport check-in by airline carriers is usually the first procedure for a

passenger when arriving at an airport and it includes the passenger identity registration, baggage registration and emission of a boarding pass.

[37] The *FAA Notice* discloses on page 19222 that “[t]he CAPS system relies solely on information that passengers presently provide to air carriers for reasons unrelated to security”. It follows that the needed information is readily available at the check-in step, prior to a plurality of individuals’ arrival at the entrance of the secure boarding area. We consider that the POSITA would understand that the CAPS screening can begin as soon as passengers’ information is verified by the airline employees at check-in counters or terminals.

[38] On the same page, the *FAA Notice* further discloses that “[t]he CAPS system is based on the same concept as the manual screening system, ... One important advantage is that it does not rely on the judgement of individual airline employees to reduce the population of persons to whom heightened security measures should be applied”. The POSITA would understand from the *FAA Notice* and the CGK that for airline employees to make a judgement during the manual screening, such manual screening occurs at the check-in stage, prior to arriving to the secure boarding area. The POSITA is taught by the *FAA Notice* that the CAPS system is based on the same concept.

[39] The *FAA Notice* also discloses on page 19220 that “[t]he checked baggage of CAPS selectees would be screened by EDS [explosive detection system] equipment, where available, or bag matching would be applied”. For the CAPS system to allow baggage matching and further screening by EDS equipment based on passenger profiling results, we consider that the POSITA would understand that the CAPS screening is performed prior to a plurality of individuals’ arrival at the entrance of the secure boarding area.

[40] In view of the foregoing considerations, we are of the view that the POSITA, having knowledge of the *FAA Notice*, would be led directly to use the CAPS system in a

way that the screening step is to be performed no later than at the check-in by the airline carrier (i.e., prior individuals' arrival at the entrance of the secure boarding area) so that: 1) the checked baggage receive a matching "selectee" or "not selectee" status prior to potential further screening by EDS; and 2) the security personnel can efficiently direct individuals having the "selectee" status and their carry-on baggage to an investigation location once they arrive to but before their entry into the secure boarding area.

[41] Further, had we been of the view that the POSITA would not necessarily understand from the *FAA Notice* when exactly the CAPS system screens the individuals, it is our view that among all implementation variants of the CAPS system that would have been obvious to the POSITA, the most self-evident and appropriate time to separate (i.e., screen) passengers into a very large majority who present no security risk and a small minority who merit more intense scrutiny prior boarding an airplane is at the check-in stage for the same reasons presented in the above paragraphs [36] to [38].

[42] With respect to the submissions that the *FAA Notice* does not appear to describe in details the manner in which individuals are identified as being selected for further investigation or not and that the *FAA Notice* does not disclose assigning a hold status to all individuals, and then altering this status to "release" for those individuals who are not selected for further investigation, we consider that said submissions have at least been addressed by the reasons given with respect to claim 2 on file (see para [29] above). In any case, we are of the view that it is well within the ordinary skills of the POSITA to use commonly known means to associate and alter a status to a data record, including by way of a field in data associated with an individual. The mere existence of several obvious design options does not render any of these options inventive. In other words, we consider that implementing a feature of attributing statuses on the basis of the screening process results would not require any degree of invention from the POSITA.

- [43] Further, we are of the view that a “hold/release” design wherein a “hold” status associated with individuals not selected is altered to a “release” status is an obvious design alternative to the “selectee/not selectee” design of the CAPS system wherein the status associated with individuals selected by the system is altered to a “selectee” status. The underlying idea is the same: in both systems, the individuals have one of two statuses automatically associated with their data records after screening, namely, one that merits more intense security scrutiny and one that does not. The system user at the entrance of the secure environment can then route the individuals to the secure environment or an investigation location on the basis of their associated status. Although technically different in form, we are of the view that such difference is inconsequential with respect to routing individuals that merit more additional investigation and is not one that that supports inventiveness for the claimed system. We consider that there is no unexpected or surprising advantage associated with the “hold/release” design and we further consider that there is no indication or suggestion in the specification or the CGK that ingenuity would be required from the POSITA to put into practice said design.
- [44] The further features and limitations of the proposed dependent claims 2 to 4 (i.e., creating a manifest of the individuals selected for investigation, providing a record of the investigation, receiving and storing individualized search criteria along with the user’s identification code) have been considered and addressed by the reasons given in the PR Letter with respect to the dependent claims on file (see para [29] above) and/or the proposed claims set-1 (see para [30] above). The RPR Letter focused on the features of proposed claim 1 and has not offered specific submissions with respect to the features of the proposed dependent claims.
- [45] In view of the above, we consider that the proposed claims set-2 does not comply with section 28.3 of the *Patent Act*. Accordingly, we are also of the view that the proposed claims set-2 does not meet the requirements of a “necessary” amendment under subsection 30(6.3) of the *Patent Rules*.

RECOMMENDATION OF THE BOARD

[46] We recommend that the application be refused on the basis that the subject-matter of claims 1 to 6 on file would have been obvious, contrary to section 28.3 of the *Patent Act*.

[47] Given that the proposed claims set-2 would not remedy the obviousness defect of the claims on file, we decline to recommend that the Applicant be notified under subsection 30(6.3) of the *Patent Rules* that said proposed claims are necessary to comply with the *Patent Act* and *Patent Rules*.

Marcel Brisebois
Member

Andrew Strong
Member

Andy Wong
Member

DECISION

- [48] I concur with the findings of the Patent Appeal Board and its recommendation that the application should be refused because the subject-matter of the claims on file would have been obvious, contrary to section 28.3 of the *Patent Act*.
- [49] Accordingly, I refuse to grant a patent on this application. Under section 41 of the *Patent Act*, the Applicant has six months within which to appeal my decision to the Federal Court of Canada.

Johanne Bélisle
Commissioner of Patents
Dated at Gatineau, Quebec,
this 26th day of April, 2019