

Commissioner's Decision #1432  
Décision du Commissaire #1432

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

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

Application No.: 2 457 533  
Demande n°.: 2 457 533



IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2 457 533, 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 2 457 533, which is entitled “Systems and methods for scheduling reoccurring deliveries and pickups”. The application is owned by United Parcel Service of America, Inc. The outstanding defect is that the claims do not define statutory subject matter, contrary to section 2 of the *Patent Act*. The Patent Appeal Board (the Board) has reviewed the rejected application pursuant to paragraph 30(6)(c) of the *Patent Rules*. As explained below, our recommendation is to refuse the application.

## BACKGROUND

### The application

- [2] Canadian patent application 2 457 533 was filed on August 8, 2002 and published on February 20, 2003.
- [3] The invention relates to the scheduling of reoccurring deliveries or pickups (also referred to as “delivery vehicle visits”). More particularly, it permits a user to make a single request and schedule a series of deliveries or pickups.

### Prosecution history

- [4] On December 9, 2014, a Final Action (FA) was written pursuant to subsection 30(4) of the *Patent Rules*. The FA stated that the application is defective by way of the claims on file (i.e. claims 1 to 22) not complying with section 2 of the *Patent Act*.
- [5] In a June 4, 2015 response to the FA (R-FA), the Applicant proposed to amend independent claim 1, resulting in a proposed set of 22 claims (the first proposed claims), and submitted arguments for allowance. In particular, the Applicant contended that the claims on file include physical computerized elements and are thus directed to statutory subject matter.
- [6] As the Examiner considered the application not to comply with the *Patent Act*, the application was forwarded to the Board for review on November 4, 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 by the FA.
- [7] With a letter dated November 9, 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. With its responses on February 3, 2016, April 7, 2016 and April 11, 2016, the Applicant proposed different amendments for independent claim 1, resulting a new proposed set of 22 claims (the second proposed claims), and made further submissions regarding subject matter but declined the

offer of an oral hearing, instead requesting the review to proceed based on the current written record.

- [8] Pursuant to paragraph 30(6)(c) of the *Patent Rules*, a Panel was formed to review the rejected application and make a recommendation as to its disposition. In a letter dated June 22, 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 of the *Patent Act*.
- [9] On July 20, 2017, the Applicant acknowledged receipt of the Panel Letter but stated that it did not wish to file any further submissions.

## ISSUE

- [10] The issue to be resolved by this review is whether the claims on file define subject matter falling within the definition of invention in section 2 of the *Patent Act*.

## 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 [*MOPOP*], the first step of purposive claim construction is to identify the skilled person and his or her relevant common general knowledge (CGK). The next step is to identify the problem addressed by the inventors and the solution put forth in the application. Essential elements can then be identified as those required to achieve the disclosed solution as claimed.

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

[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*.

## ANALYSIS

### Purposive construction

#### *The skilled person*

[15] In the Panel Letter, we identified the skilled person as a team comprising one or more business professionals from fields related to delivery and pickup services, and programmers experienced with developing and maintaining the tools for such professionals.

#### *The CGK*

[16] Based on the identification of the CGK in the FA, on the application's description of the prior art and on the references cited by the application, we identified the following concepts as CGK in the Panel Letter:

- The procedures and tools typically involved in scheduling delivery and pickup services;
- The ability to make a standing request for a repeating series of regular pickups;
- General-purpose computing devices and appropriate programming techniques;
- Conventional computerized systems allowing customers to schedule deliveries in real time, via the Internet, by selecting an available time window on a given day;
- The "bucket method" of scheduling a pre-determined number of deliveries for each of a number of time windows within a given day;
- Standard routing and scheduling software (such as Roadnet 5000);
- Conventional computerized systems providing customers instant confirmation of a scheduled delivery service; and
- Conventional communications networks, software media, methods of accessing database information and methods of automatically sending communications to users.

- [17] As mentioned above, the Applicant did not make any submissions in response to the Panel Letter regarding its analysis. Accordingly, we adopt its identifications of the skilled person and CGK here.

*The problem to be solved*

- [18] The FA identified the focus of the invention:

According to the description, the prior art delivery scheduling systems for scheduling deliveries in real-time over the Internet require customers to schedule each delivery individually, and do not allow for customers to schedule periodic deliveries in a single request (see page 2, lines 11 to 25).

Although it is known to schedule periodic deliveries (*Recigno* – pages 2 to 3), prior art systems which allow for the scheduling of periodic deliveries generally do not provide immediate feedback to the user as to whether or not the request may be satisfied for all pickups (see page 3, lines 18 to 31).

- [19] Although the R-FA and the Applicant's letter of April 7, 2016 disagreed with the approach to purposive construction in the FA, they did not dispute the above identification. The SOR and the other letters from the Applicant added nothing further to this identification.
- [20] We noted in the Panel Letter that the inability to schedule periodic delivery vehicle visits and the lack of immediate feedback are separate, independent problems. We also noted that, according to the description (page 3), another disadvantage of the prior art system for arranging periodic pickups is that though it permits customers to request a series of periodic pickups, it does not permit the customer to schedule them. This disadvantage seems to correspond to the first problem identified above.

*The proposed solution*

- [21] In the Panel Letter, we accepted the FA's identification of the solution:

The presently claimed invention proposes to overcome these disadvantages by providing an improved delivery scheduling system that allows a user to schedule multiple deliveries from a single request (page 3, line 32 to page 4, line 5).

- [22] As we noted in the Panel Letter, this definition of the solution does not refer to the provision of immediate feedback. Since such provision would relate to a separate problem (as stated above), we agree with its absence from the solution. Our view is also supported by the fact that such provision is not recited by the claims.
- [23] In addition, as explained in the Panel Letter, we do not see the problem and the solution as residing in any equipment or infrastructure used to schedule delivery or pickup services in real time via the Internet. Such details are not the focus of the



application, which instead proposes a solution relating to the rules or procedure the customer is permitted to follow to schedule multiple delivery vehicle visits.

[24] Our view regarding the problem and solution can also be supported by the fact that means for providing immediate feedback, automatically computing data and communicating information via the Internet in real time already exist in the CGK.

[25] As mentioned above, the Applicant did not make any submissions in response to the Panel Letter regarding its analysis. Accordingly, we adopt its characterization of the problem and solution here.

*The essential elements*

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

1. A computer system for scheduling delivery vehicle visits by a delivery service to a customer, comprising:
  - a carrier comprising a computer readable medium storing data corresponding to a plurality of time windows; and
  - the computer readable medium comprising computer executable instructions for performing the steps of:
    - (A) identifying a particular one of said plurality of time windows in which it would be possible for said delivery service to make a delivery vehicle visit to said customer on a particular day;
    - (B) receiving information including
      - (1) a request that a said delivery service make a first delivery vehicle visit to said customer within said particular time window on said particular day; and
      - (2) an indication that a user wishes to schedule a periodic series of delivery vehicle visits that includes said first delivery vehicle visit and one or more additional delivery vehicle visits, each delivery vehicle visit within said periodic series to be made on a different day, but within said particular time window;
    - (C) receiving, from said user, a schedule for said periodic series of delivery vehicle visits; and
    - (D) adding said first delivery vehicle visit to a routing schedule:
      - a periodic scheduling job configured to be executed by said computer readable medium to perform the steps of:
        - using a carrier's first set of scheduling information to determine whether said delivery service can make a particular one of said additional requested delivery vehicle visits; and
        - in response to determining that, based on said carrier's first set of scheduling information, said delivery service can make said particular one of said additional

requested delivery vehicle visits, tentatively scheduling said particular one of said additional requested delivery vehicle visits by adding said particular one of said additional requested delivery vehicle visits to a tentative scheduling database.

[27] As we noted in the Panel Letter, the preambles of the claims introduce computer systems comprising software and the dependent claims recite 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 consider, based on the CGK and on the problem and solution identified above, that the skilled person would understand the set of essential elements to be the same for each of claims 1 to 22 and to be for scheduling a series of delivery vehicle visits.

[28] As stated in the Panel Letter, these elements comprise:

- Identifying, to a customer, a particular one of a plurality of time windows in which it would be possible for a delivery service to make a delivery vehicle visit to the customer on a particular day;
- Selecting, by the customer, of the particular time window for a first delivery vehicle visit;
- Indicating, by the customer, a wish to schedule a periodic series of delivery vehicle visits including the first visit and one or more additional delivery vehicle visits, each of which to be made on a different day but within the particular time window;
- Adding the first visit to a routing schedule by:
  - Using a set of scheduling information to determine whether the delivery service can make a particular one of the additional visits; and, if so,
  - Tentatively scheduling the first visit and a particular one of the additional visits.

[29] Although the Applicant made no further submissions concerning the essential elements in response to the Panel Letter, the R-FA and the Applicant's letter of April 7, 2016 had contended that the physical details recited by the claims—and the Internet—should be among the essential elements. The Applicant had argued that the claimed invention requires the interaction of the computer (or computers) and the Internet for real-time operation and to permit the receipt of requests from the customer—the claimed invention cannot otherwise be carried out in the same way.

[30] As explained by the Panel Letter, the use of these physical elements (and the Internet) is outside the concern of the problem and solution. The application proposes to solve a problem relating to the rules or procedure a customer is permitted to follow to schedule multiple delivery vehicle visits, not a problem lying in any

equipment or infrastructure used to communicate requests or perform computations in real time. Therefore, such physical elements may be part of the working environment of the invention but are not essential elements of the invention itself. As stated in *MOPOP* at § 13.05.02c, not every element that has a material effect on the operation of a given embodiment is necessarily an essential element of the solution.

[31] Therefore, our view is that the essential elements of claims 1 to 22, as purposively construed, are the rules and procedure for scheduling a series of delivery vehicle visits. The recited physical elements are considered to be non-essential elements.

### **Statutory subject matter**

[32] As construed above, the essential elements of claims 1 to 22 are the rules and procedure for scheduling a series of delivery vehicle visits. Such matter is outside the categories of invention within section 2 of the *Patent Act*.

[33] Therefore, we maintain our view as expressed in the Panel Letter: claims 1 to 22 do not define statutory subject matter and thus do not comply with section 2 of the *Patent Act*.

### **Proposed claims**

[34] As explained in the Panel Letter, the Applicant proposed in the R-FA to amend claim 1, but the Examiner did not accept the amendment as remedying the defect. With its letter of April 11, 2016, the Applicant again proposed to amend claim 1. According to this proposal, claim 1 would emphasize that the software causes a “scheduling module” to perform the operations, that the identification of a particular time window involves a determination of whether the delivery service can make a visit in any of the time windows for a particular day and that information is received from the customer via the interface of a network-connected device. The proposed claim 1 would also no longer refer to “real time” but it would define information included in the carrier’s first set of scheduling information.

[35] Given that these differences would not alter the above identifications of the skilled person, CGK, and problem and solution, the second proposed claims would also be construed as having only rules and a procedure for scheduling a series of delivery vehicle visits for their essential elements.

[36] Accordingly, our view concerning non-statutory subject matter also applies to the second proposed claims. It follows that the second proposed claims are not considered a necessary specific amendment under subsection 30(6.3) of the *Patent Rules*.

## RECOMMENDATION OF THE BOARD

- [37] In view of the above, the Panel recommends that the application be refused on the basis that claims 1 to 22 define non-statutory subject matter and thus do not comply with section 2 of the *Patent Act*.
- [38] We also do not consider the claims proposed on April 11, 2016 to constitute specific amendments necessary to comply with the *Patent Act* and *Patent Rules*. Accordingly, we decline to recommend that the Applicant be notified under subsection 30(6.3) of the *Patent Rules* that they are necessary.

Leigh Matheson  
Member

Marcel Brisebois  
Member

Andrew Strong  
Member

## DECISION

- [39] I concur with the findings of the Board and its recommendation to refuse the application because the claims on file do not comply with section 2 of the *Patent Act*.
- [40] 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 20<sup>th</sup> day of November, 2017