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TOPIC: O00 Obviousness

SUJET: O00 Évidence

Application No. 2,909,155

Demande n° 2 909 155

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,909,155, having been rejected under subsection 199(1) of the *Patent Rules* (SOR/2019-251) ("*Patent Rules*"), has subsequently been reviewed in accordance with paragraph 86(7)(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 2,909,155 (“the instant application”), which is entitled “SYSTEMS AND METHODS FOR PROCESSING INPUT STREAMS OF CALENDAR APPLICATIONS” and is owned by SHIGABUTDINOV, RUSLAN ALBERTOVICH (“the Applicant”). The outstanding defect indicated by the Final Action (“FA”) is obviousness. The Patent Appeal Board (“the Board”) reviewed the rejected application in accordance with paragraph 86(7)(c) of the *Patent Rules* (SOR/2019-251). As explained in more detail below, the Board’s recommendation is that the Commissioner of Patents refuse the application.

BACKGROUND

The application

- [2] The instant application, based on a previously filed Patent Cooperation Treaty application, has a filing date of April 10, 2013, and was laid open to public inspection on October 16, 2014.
- [3] The instant application relates to a method for processing input streams of calendar applications. It contains 18 claims on file, which were received at the Patent Office on March 10, 2021 (“claims on file”).

Prosecution history

- [4] On October 5, 2021, an FA was issued under subsection 86(5) of the *Patent Rules*. The FA stated that claims 1 to 18 on file are directed to subject-matter that would have been obvious and thus do not comply with section 28.3 of the *Patent Act*.
- [5] On February 1, 2022, the Applicant submitted a response to the FA (“R-FA”). In the R-FA, the Applicant submitted a proposed set of claims 1 to 18 as well as proposed amendments to the description (“proposed amendments set-1”). They contended that both the claims on file and the proposed claims complied with section 28.3 of the *Patent Act*.

- [6] As the Examiner maintained the view that the instant application would have been obvious after considering the R-FA, the application was forwarded to the Board on October 7, 2022, with a Summary of Reasons.
- [7] The Summary of Reasons was forwarded to the Applicant on October 11, 2022.
- [8] The present panel (“the Panel”) was established to review the instant application pursuant to paragraph 86(7)(c) of the *Patent Rules*.
- [9] In a preliminary review letter dated February 10, 2023 (“PR letter”), we conducted a preliminary analysis and preliminarily concluded that both claims 1 to 18 on file and the proposed claims in proposed amendments set-1 would have been obvious to the skilled person, thus not complying with paragraph 28.3(b) of the *Patent Act*. Consequently, we preliminarily considered that proposed amendments set-1 was not a necessary amendment under subsection 86(11) of the *Patent Rules*.
- [10] On March 8, 2023, the Applicant submitted a further written response (“R-PR”) with a new set of proposed claims (“proposed claim set-2”), arguing that these proposed claims would not have been obvious.
- [11] A hearing took place on April 25, 2023.

ISSUE

- [12] This review addresses whether the claims on file fulfill the non-obviousness requirement under section 28.3 of the *Patent Act*.
- [13] If the claims on file are found to be defective, we will also consider proposed claim set-2, which has replaced proposed amendments set-1, and determine whether it constitutes a necessary amendment under subsection 86(11) of the *Patent Rules*.

OBVIOUSNESS

- [14] We maintain that all claims on file would have been obvious to a person skilled in the art. Furthermore, we have concluded that proposed claim set-2 does not overcome the obviousness defect.

Legal principles

[15] In accordance with *Free World Trust v Électro Santé Inc*, 2000 SCC 66, and *Whirlpool Corp v Camco Inc*, 2000 SCC 67, purposive construction is performed from the point of view of the person skilled in the art in light of the relevant common general knowledge (“CGK”), considering the whole of the disclosure including the specification and drawings. In addition to interpreting the meaning of the terms of a claim, purposive construction distinguishes the essential elements of the claim from the non-essential elements.

[16] 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 before the one-year period immediately preceding the filing date or, if the claim date is before that period, before the claim 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.

[17] In *Apotex Inc v Sanofi—Synthelabo Canada Inc*, 2008 SCC 61 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?

[18] The following documents, cited in the FA and the PR letter, are deemed relevant:

- D1: US 2012/0035925 A1 February 9, 2012 Friend et al.
- D2: US 2007/0288279 A1 December 13, 2007 Haugen et al.
- D3: CA 2 745 616 A1 January 29, 2012 Jain
- D4: US 8,370,763 B1 February 5, 2013 Moore et al.
- D5: Wang et al., “Multimedia content analysis—using both audio and visual clues,” IEEE Signal Processing Magazine, volume: 17, issue: 6, November 2000

[19] D1 discloses a method for automatic capture and population of task and list items in an electronic task or list surface via voice or audio input through a mobile computing device. D2 discloses systems and methods for entering, associating, and utilizing time ranges, which may be associated with tasks, appointments, and reminders. D3 discloses a method and apparatus for identifying and scheduling events. D4 discloses a method and system for creating an electronic-calendar entry from a note-entry application. D5 demonstrates how texts can be extracted from image frames of video streams or audio streams using various processing techniques.

Meaning of terms

[20] The PR letter deemed the meanings of terms “imprecise relative time reference” and “a first/second data structure of a first/second type” significant to the obviousness analysis, and provided the following:

In our preliminary view, the skilled person would consider that the term “imprecise relative time reference” has the same meaning as “soft or fuzzy date/times” of D1 (paragraphs [0046] and [0047]) and “text date or time period” of D2 (paragraphs [0036] to [0038]).

Regarding the different structures of the calendar type and the memorandum type, Fig. 2 and paragraphs [00018] to [00021] of the present application demonstrate that these data structures refer to abstract collections of different data fields.

Considering the above, our preliminary estimations of these terms are:

- imprecise relative time reference: a time reference based on textual description instead of clear indication of the precise date and/or time. Examples include “after lunch” and “end of day.”
- a first/second data structure of a first/second type: a collection of different data fields that are associated with different types of text-based entries. Examples include a memorandum type and a calendar type.

[21] The Applicant did not dispute or comment on these estimations and we adopt them in this review.

[22] Next, we will address the obviousness issue using the four-step approach from *Sanofi*.

(1) Identify the notional “person skilled in the art” and their relevant CGK

[23] The PR letter provided our preliminary identifications of the skilled person and their CGK:

The FA (page 2) identified the skilled person as “a team of one or more software engineers and other professionals experienced with calendar application software, and transcribing information.” The Applicant did not explicitly contest this identification, and we adopt it for this review.

The FA identified the CGK with paragraph [0038] of D2, paragraph [0093] of D3, and column 5 of D4. The Applicant did not explicitly contest this identification.

Based on the “Background” section of D1, D2, D4, the present application, and known techniques recited in D5, we preliminarily consider the following as CGK:

- Knowledge regarding design, implementation, operation, and maintenance of conventional electronic calendar applications and text-based electronic memorandums (present application: paragraph [0001]; D2: [0001]; D4: “Background” section);
- Knowledge of utilizing a computer device to access the above-mentioned electronic calendar applications and memorandum applications (present application: paragraph [0001]; D2: [0001]; D4: “Background” section); and
- Knowledge of extracting texts from image, audio, and video input streams utilizing known techniques such as optical character recognition, speech recognition, and natural language processing (D5).

[24] The Applicant did not dispute or comment on these identifications and we adopt them in this review.

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

[25] As stated in the PR letter, considering the whole of the specification, the skilled person would understand that there is no use of language in the claims indicating that any of the elements are optional, a preferred embodiment, one of a list of alternatives, or otherwise non-essential. Therefore, we presume that all claimed elements are essential and we consider all claimed elements as representing the inventive concept.

(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

[26] The PR letter provided our preliminary identification of the difference between the state of the art and the inventive concept of the independent claims on file:

Independent claim 1 reads:

1. A method for processing input streams of calendar applications, the method comprising:

receiving, by a computer system, a first input stream comprising at least one of: a text stream, an image, a video stream, or an audio stream;

processing the first input stream to produce a first sequence of characters;

responsive to determining that the first sequence of characters comprises no time references, storing, in a first data structure of a first type, a memorandum comprising at least part of the first sequence of characters;

receiving a second input stream modifying the memorandum;

processing the second input stream to produce a second sequence of characters;

responsive to determining that the second sequence of characters comprises an imprecise relative time reference related to a user action, converting the memorandum into a calendar entry; and

storing, in a second data structure of a second type, the calendar entry comprising an identifier of a time referenced by the imprecise relative time reference.

Independent claims 11 and 14 recite a system and apparatus with similar features as claim 1. Dependent claims 2 to 10, 12 to 13, and 15 to 18 recite further limitations regarding contents of the data structures (claims 2 to 7, 12, 15, and 16), a graphic interface (claims 9, 10, 13, and 18), and input stream processing (claims 8 and 17).

The FA (pages 3 to 9) considered that D1 disclosed all claimed features of the independent claims except the feature of determining “a datetime from an

‘imprecise relative time.’” The FA further considered that this difference would have been obvious having regard to D1 in view of the CGK as demonstrated by D2, D3, and D4. The FA further stated that all features recited in the dependent claims were disclosed by D1.

We preliminarily consider D1 as the closest prior art, which discloses automatically capturing tasks, list items, and calendar entries via voice or audio input streams.

D1 discloses a method for processing input streams of calendar applications (paragraphs [0002], [0003], [0049], [0073], and Fig. 12), the method comprising:

- receiving, by a computer system, a first input stream comprising at least one of: a text stream, an image, a video stream, or an audio stream (paragraphs [0072], [0073]; we also note that the embodiment of processing conventional keyboard-generated text input also falls in the scope of this feature);
- processing the first input stream to produce a first sequence of characters (paragraphs [0072] to [0074]);
- responsive to determining that the first sequence of characters comprises no time references, storing, in a first data structure of a first type, a memorandum comprising at least part of the first sequence of characters (paragraphs [0028], [0072], and Fig. 1);
- receiving a second input stream modifying the memorandum (paragraph [0069], a user may “edit or otherwise manipulate” existing information via a mobile device);
- processing the second input stream to produce a second sequence of characters (paragraph [0069]);
- storing, in a second data structure of a second type, [a] calendar entry comprising an identifier of a time referenced by the imprecise relative time reference (paragraphs [0046], [0047], and [0056]).

Therefore, the only difference between D1 and the inventive concept of the independent claims is the feature of:

- “responsive to determining that the second sequence of characters comprises an imprecise relative time reference related to a user action, converting the memorandum into a calendar entry.”

[27] The Applicant did not contest this identification; however, they argued that the identified difference would not have been obvious.

[28] Dependent claims will be discussed in step (4).

(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?

Independent claims

[29] In the PR letter, we preliminarily considered that the identified difference would have been obvious:

Regarding the identified difference, D1 discloses the following:

- automatically parsing an input stream to “determine whether any of the words are associated with a particular information or data type” such as calendar information, and creating a calendar entry if the information comprises a time reference (paragraphs [0040] to [0044], [0049]);
- using imprecise relative time reference (“soft or fuzzy date/time”) for calendar entries (paragraphs [0099] and [0100]); and
- editing an existing task list responsive to requests from mobile devices (paragraph [0069]).

From above, D1 teaches parsing an input stream into words and phrases and creating a memorandum, such as a task list, based on the parsing results, wherein a calendar entry (“calendar function,” see paragraph [0049]) may be created if the parsed texts contain a time reference. Furthermore, it is also well-known that

textual information can be extracted from image, audio, and video input streams (see the CGK section).

Regarding the feature of determining imprecise relative time reference from an input stream, although D1 does not explicitly disclose it, D2 discloses this feature in paragraphs [0035] to [0038].

Regarding [the] step of converting a memorandum to a calendar entry responsive to a request to modify the memorandum with a time reference, while D1 or D2 does not explicitly disclose such a step, D1 discloses that an existing memorandum can be modified and any textual input that includes a time reference may trigger the creation of a calendar entry (paragraphs [0040] to [0044], [0049], and [0069]). Therefore, it is our preliminary view that converting a memorandum to a calendar entry after the memorandum is updated with a time reference would have been obvious to the skilled person in view of D1 and the CGK.

Consequently, in our preliminary view, the claimed subject-matter of claims 1, 11, and 14 would have been obvious having regard to D1 in view of D2 and the CGK.

[30] In the R-PR, the Applicant contended that:

Applicant notes that the PAB has failed to pinpoint a passage of D1 that allegedly teaches the subject matter of “any textual input that includes a time reference may trigger the **creation** of a calendar entry”, as alleged.

Furthermore, as the PAB will appreciate, the relevant dictionary meaning of “converting” is chang[ing] from one form or function to another” (see <https://www.merriamwebster.com/dictionary/convert>). Thus, Applicant respectfully submits that modifying a memorandum and creating a calendar entry is **not** equivalent to “converting a memorandum to a calendar entry” at least because neither of those actions separately nor in combination describes or even suggests a “change from one form or function to another”. Applicant respectfully submits that interpreting the teachings of “modifying a memorandum” and “creating a calendar entry” as allegedly corresponding to the “converting” required by the Applicant’s invention as claimed would not be possible without hindsight based on the knowledge that was obtained from the Applicant’s specification.

At least for these reasons, Applicant respectfully submits that independent claims 1, 11 and 14 presently on file, and the claims dependent therefrom and presently on file, distinguish patentably over the cited references and should be allowed.

(emphases in the original)

[31] With respect to the feature of creating a calendar entry or reminder based on detection of a time reference in a text input, D1 discloses this feature in multiple paragraphs, including paragraph [0049] as cited in the PR letter:

[0049] Consider the example entered or captured task in the form of the phrase “Meet at Bob’s Pizza Parlor at 6:00 p.m. on Friday.” Once individual words or phrases in the entry are parsed, recognized, annotated, or otherwise tagged with metadata as described above, those tagged items may be utilized by other applications to enhance the functionality of the list authoring surface. For example, [portion of texts omitted] **the time associated with the entry of “6:00 p.m. on Friday” may be passed to a calendar function utilized by the user**, and any other words or phrases of interest in the phrase may be thus utilized. [portion of texts omitted] **as the user approaches the designated time of “6:00 p.m. on Friday,” or a combination of the two, a reminder may be provided to the user via his mobile device that the time for meeting at “Bob’s Pizza Parlor” is approaching**, or that the location of “Bob’s Pizza Parlor” is approaching, or of a combination of the above. [portion of texts omitted]

[0073] In addition, transcribed audio input, for example, voice input recorded by a user, may be processed according to natural language processing, and metadata may be associated with the transcribed and processed voice or audio input to provide additional enhancement to the captured input. For example, according to natural language processing, **a captured voice input of “obtain grocery items after 5:00 p.m.” may result in metadata associated with the text portion “5:00 p.m.” to allow a task item to be generated for the captured input that may be associated with an electronic calendar application utilized by the user and for which an automatic reminder may be generated for reminding the user to obtain the desired grocery items after 5:00 p.m.** [portion of text omitted]

[0090] [portion of text omitted] For example, if the captured voice and/or audio content includes the phrase “by 5:00 p.m. on Tuesday, Jul. 4,” such **information may be utilized for generating a task reminder or calendar reminder** by identifying dates and/or times included in the captured content. [portion of texts omitted]

[0096] [portion of text omitted] As illustrated in FIG. 12, metadata associated with words, terms or phrases extracted from captured voice and/or audio input may be **utilized for generating reminders and/or calendar entries associated with captured input**, as described above. [portion of texts omitted]

[0097] [portion of text omitted] **timelines including hard dates/times and soft or fuzzy dates/times associated with task items or list items generated from recorded voice and/or audio content may be enabled and may be utilized for generating reminders and calendar entries associated with any generated task items or list items.** [portion of text omitted]

(emphases added)

- [32] The cited paragraphs above from D1 contain a plurality of examples demonstrating that calendar entries or reminders associated with existing memorandums (“task items or list items”) can be generated in response to identification of “hard dates/times and soft or fuzzy dates/times” in captured text inputs.
- [33] Given the teachings of D1 and the CGK, the skilled person would understand that “converting a memorandum to a calendar entry” would have been a straightforward and non-inventive implementation choice when a captured text input to modify the memorandum contains an absolute or imprecise relative time reference.
- [34] Firstly, we note that the expression of “converting a memorandum to a calendar entry” is mentioned only once in the specification of the instant application in paragraph [00040]:

[00040] In certain implementations, the computer system 1000 may accept a user input editing an existing calendar entry or an existing memorandum. In one example, **responsive to accepting a user input editing a memorandum, the computer system 1000 may determine that the newly added text comprises a**

time reference. Following such a determination, the computer system 1000 may convert the memorandum into a calendar entry, and store in the calendar entry data structure the time identified by the time reference along with zero or more optional fields, as described in more details herein above (emphasis added).

- [35] The specification does not provide any implementation details on how to convert a memorandum entry to a calendar entry, “from one form or function to another.” We presume that the skilled person would consider the implementation of this conversion straightforward, requiring no inventive ingenuity. Otherwise, the specification would be deficient in terms of sufficiency.
- [36] Given the absence of implementation details in the instant application, we consider that the feature of converting a memorandum into a calendar entry is functionally identical to the process of creating a calendar entry based on the memorandum and subsequently deleting the memorandum. Both methods manipulate the same data and perform the same core function of repurposing memorandum data into a calendar entry. The only difference, the elimination of the memorandum in the latter, does not introduce an inventive step as it is a routine data management operation. Consequently, the two processes are not patentably distinct.
- [37] Further, D1 discloses the following:
- creating a calendar entry or reminder, which is associated with existing memorandums, responsive to determining that a received user input comprises an absolute or imprecise relative time reference (paragraphs [0049], [0073], [0090], [0096], and [0097]); and
 - receiving user-initialized input to edit existing memorandums (“tasks, events, activities”); the editing process includes manipulating data or incorporating additional information (paragraphs [0069] and [0076]).
- [38] In light of the information above, a skilled person would have found the following process straightforward: when a user input is received to edit a memorandum and an imprecise relative time reference is detected in the newly added text, the memorandum is edited, and a calendar entry is created based on the contents of the input and the memorandum. We consider that the above-mentioned process falls within the scope of, or is at least not patentably distinguishable from, the

identified difference of “responsive to determining that the second sequence of characters comprises an imprecise relative time reference related to a user action, converting the memorandum into a calendar entry.”

[39] For the reasons above, we conclude that the identified difference in step (3) would have been obvious.

Dependent claims

[40] In the PR letter, we preliminarily considered that the additional features in the dependent claims would also have been obvious:

Claims 2, 12, and 15 recite parsing the sequence of characters to produce calendar items representing at least one of a type identifier, a title, a description, an event location, an initiator identifier of the event, a list of participants of the event, and storing the items in a data structure. D1 discloses this feature in paragraphs [0046] to [0049] and [0072] to [0074].

Claims 3 and 16 recite storing a pointer to an attachment in one of the data structures. In paragraphs [0005] and [0072], D1 discloses that voice or audio files may be attached to the transcribed contents. Hence, we preliminarily consider that it would have been a straightforward implementation to use a pointer to an attachment to the transcribed contents for access purposes. Therefore, it is our preliminary view that this feature would have been obvious to the skilled person.

Claim 4 recites storing a current time in one of the data structures. D1 discloses displaying a current time in a calendar application (Fig. 6). Therefore, we preliminarily consider that a calendar entry data structure including the displayed current time would have been obvious to the skilled person.

Claims 5 and 6 recite that the time reference comprises at least one of a date, an hour, a minute, a second, or a time zone identifier, and at least one of a start time, an end time, or a duration of the event. D1 discloses these features in Fig. 8, Fig. 12, and paragraphs [0046], [0047], [0049], and [0072].

Claim 7 recites that the time reference comprises at least one of an absolute time reference or a relative time reference. D1 discloses this feature in paragraphs [0040], [0044], [0046], and [0047].

Claims 8 and 17 recite that processing the first input stream comprises converting the image into a sequence of characters. D1 discloses that photographic functions may be for the capture and generation of task or list items (paragraphs [0082] and [0128]). Also, techniques for extracting texts from images such as optical character recognition are well-known (see the CGK section). Therefore, we preliminarily consider that this feature would have been obvious to the skilled person.

Claims 9, 13, and 18 recite rendering the data structure information in a calendar view or a notepad view. D1 discloses this feature in Fig. 1 to 3, Fig. 6 to 8, and Fig. 10 to 12.

Claim 10 recites rendering the data structure information with a graphic reference to a time indicator. D1 discloses this feature in Fig. 6, Fig. 8, and Fig. 12.

Since claims 2 to 10, 12, 13, and 15 to 18 are dependent upon claims 1, 11, and 14, directly or indirectly, the features of these claims have been considered in combination with the claims to which they refer. Our preliminary view is that the subject-matter of claims 2 to 10, 12, 13, and 15 to 18 would have been obvious having regard to D1 in view of D2 and the CGK.

[41] The applicant did not submit specific comments on the analysis of the dependent claims.

Conclusion on obviousness

[42] In summary, we consider that all claims on file would have been obvious to the skilled person having regard to D1 in view of D2 and the CGK.

PROPOSED CLAIMS

[43] We do not consider that proposed claim set-2 would overcome the obvious defect.

[44] Proposed claim set-2 introduces the following additional features:

- converting, by applying one or more pre-defined conversion rules that map imprecise time references to corresponding absolute times, the imprecise relative time reference into an absolute time reference; and
- storing, in the second data structure, the calendar entry comprising the absolute time reference.

[45] In the R-PR and during the hearing, the Applicant further contended that D2 did not disclose the “pre-defined conversion rules” and thus the newly introduced feature was inventive in view of D2. We respectfully disagree.

[46] The only place in the specification mentioning this feature is paragraph [00031]:

[00031] In certain implementations, the computer system 1000 may convert an imprecise relative textual time reference into a time data structure, by applying one or more pre-defined conversion rules and/or configuration parameters mapping imprecise time references to times, such as, for example, “after lunch,” “close of business,” “end of day,” etc.

[47] No further details are provided by the specification regarding the contents of the “pre-defined conversion rules” or how the conversion may be performed according to these rules.

[48] Although D2 does not explicitly cite “rules” for converting an imprecise relative time reference into an absolute time reference, it presents examples of how this can be accomplished. For instance, D2 describes the conversion of imprecise relative time references such as “tomorrow” or “today” to absolute time references in paragraphs [0036] to [0038]:

[0036] One input that may be used to specify a time range 210 is a text date or time period 235. In contrast to an explicit date or time 255, described below, **a text date or time period 235 in this sense may often be specified using a time period that doesn’t incorporate an explicit date or time**—that is, using a time period that doesn’t explicitly say, for example, “October 6,” “5:00 pm, and so on. Instead, the text date or time period 235 may be specified in terms of periods of time, and in some cases also specified relative to particular dates or times. These periods of time include, but are not limited to, “this morning,” “this afternoon.” “this

evening,” “today,” “tomorrow,” “tomorrow morning,” “tomorrow afternoon.”
“tomorrow evening,” “next Monday” (and “next Tuesday,” and so on) [portion of text omitted].

[0037] When a text date or time period 235 is specified, **the corresponding time range 210 may be determined using the current time and date when the text date or time period is entered, or some other point in time.** This point or date in time, including the current time and date, is one example of other information 240 that might be used to determine the time range 210. For example, if today’s date is Oct. 28, 2006, a text date or time period of “tomorrow” might resolve to “Oct. 29, 2006” or “Oct. 29, 2006 12:00 am (midnight) to 11:59 pm. On the same day, a text date or time period of “today” might resolve to “Oct. 28, 2006.” If the current time is 2:30 pm, the period “today” might resolve to time ranges like “2:30 pm to 11:59 pm,” or “October 28, 2:30 pm to 11:59 pm,” or “12:00 am (midnight) to 11:59 pm,” or “October 28, 12:00 am (midnight) to 11:59 pm.”

[0038] **A particular point or date in time, like the current time and date, may also be used with additional logic to determine to which date or time period a particular input refers.** For example, a text date or time period of “spring.” might in some cases refer to the time range from “April 1 of this year to June 30 of this year.” This time range might result when, for example, the current time when the time range is specified is sometime during the immediately preceding winter, or perhaps during the first one or two months of the spring. In contrast, if a text date or time period of “spring” is provided, for example, during the summer or fall of a particular year, the term “spring” might resolve to “April 1 of next year to June 30 of next year.”

(emphases added)

- [49] Evidently, D2 discloses the conversion process utilizing inferred rules, such as determining a corresponding time range using “a particular point or date in time, like the current time and date” and/or “additional logic.” In our view, these exemplify “pre-defined conversion rules” for the time reference conversion. Further, storing calendar entries with absolute time references in a data structure is considered to be part of the CGK since it is well-known that calendar entries typically incorporate absolute time references. Therefore, proposed claim set-2

does not introduce any additional inventive features that are patentably distinct from the teachings of D1 and D2.

- [50] Consequently, we conclude that the additional features in proposed claim set-2 would have been obvious to the skilled person, when considered separately or in combination with other claimed features. Therefore, proposed claim set-2 does not comply with paragraph 28.3(b) of the *Patent Act* and cannot be considered a necessary amendment under subsection 89(11) of the *Patent Rules*.

RECOMMENDATION OF THE BOARD

- [51] In view of the above, we recommend that the application be refused on the ground that claims 1 to 18 on file would have been obvious and thus do not comply with paragraph 28.3(b) of the *Patent Act*.
- [52] Further, proposed claim set-2 does not overcome the obviousness defect and therefore the introduction of these amendments does not constitute a “necessary” amendment pursuant to subsection 86(11) of the *Patent Rules*.

Liang Ji

Howard Sandler

Blair Kendall

Member

Member

Member

DECISION OF THE COMMISSIONER

[53] I concur with the recommendation of the Board that the application be refused on the ground that claims 1 to 18 on file would have been obvious and are non-compliant with paragraph 28.3(b) of the *Patent Act*.

[54] Therefore, in accordance with section 40 of the *Patent Act*, 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.

Konstantinos Georgaras
Commissioner of Patents

Dated at Gatineau, Quebec
this 2nd day of June, 2023