Commissioner=s Decision # 1327

Décision du Commissaire # 1327

TOPIC: O-00

SUJET: O-00

Application No: 2,206,896

Demande no: 2,206,896

COMMISSIONER'S DECISION SUMMARY

C.D. 1327 Application 2,206,896

The application relates to a system for preparing a schedule for travel. Requiring only the input of a user=s general time and location requirements, the system prepares a basic outline of a proposed travel schedule with various events or activities listed. The system then produces a detailed plan with multiple facilities or reservations which correspond to the activities in the rough outline. The system also provides for schedule adjustments due to traffic or weather conditions.

Obviousness

The Examiner rejects the application stating that the claims are obvious in view of two published United States patent documents.

Held: The application is found allowable by the Commissioner of Patents, provided specific amendments are made to the claims.

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,206,896, having been rejected by the Examiner under subsection 30(3) of the *Patent Rules*, was reviewed by the Patent Appeal Board and by the Commissioner of Patents.

The recommendation of the Board and the decision of the Commissioner are as follows:

Agent for the Applicant

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Introduction

- [1] This decision relates to patent application 2,206,896 entitled ASCHEDULE SETTING AND PROCESSING SYSTEM@. The Applicant is TOYOTA JIDOSHA KABUSHIKI KAISHA. The inventors are Koji SATO, Masafumi KIZU, Makoto MORITA and Masanobu YAMASHITA.
- [2] The application was filed on 01 December 1995, claiming priority from Japanese application JP 6-298290 dated 01 December 1994. The Request for Examination was made on 6 June 1997. Following three Office Actions, the examiner in charge issued a Final Action on 15 July 2005, rejecting the application for claiming obvious subject matter. The Applicant responded to the Final Action on 21 December 2005, amending the claims.
- [3] Having determined the Applicant=s amendments and arguments did not overcome the grounds for rejection, the examiner forwarded the application and a Summary of Reasons (SOR) to the Patent Appeal Board (Athe Board@). The SOR was forwarded to the Applicant on 20 December 2006.
- [4] The Applicant made no additional arguments or amendments in response to the SOR. In a letter dated 11 July 2008, the Applicant declined the opportunity for an oral hearing, and requested that this recommendation be based on the written prosecution on file.
- [5] Subsequent to the date of the SOR, the Supreme Court of Canada released its decision in Sanofi-Synthelabo Canada Inc. v. Apotex Inc., 2008 SCC 61 [Sanofi]. The Board provided a Supplemental Analysis (SA) from the examiner to the Applicant on 3 March 2010, to address the Sanofi steps. Applicant=s

response to this analysis was received by the Board on 2 June 2010.

Invention

- for preparing a travel schedule for a traveller, travel planner or vehicle driver. Conceptually, the system provides functionality similar to that of a trip planner or tourist advisor, but in automated form. The schedule preparation system will allow for a user to input basic travel requirements, and will then automatically prepare a travel schedule which fits the basic user requirements, including multiple activities or places to visit. The system will also perform any necessary reservations for the activities or locations planned for the trip.
- [7] A typical application of the schedule system is an in-vehicle installation. The system components (see Figure 1 of the application) comprise a terminal device (including processor, display and memory components) for interface with the user, a host information processing centre which interfaces with other known reservation systems, and a communication link between the host centre and the terminal device. The system can also interface with a known in-vehicle navigation system (not claimed) so that the prepared travel schedule can be used by the navigation device to map a travel route.
- [8] As discussed in the application under the section ABackground Art@ (pages 1-3), prior art travel scheduling systems are known which will prepare a travel plan that enables a user to travel to a chosen location within a prescribed time period. Additionally, the prior art systems have the capability to book reservations for a particular activity at that chosen

destination location. Thus, for example, a driver may wish to create a schedule to travel from their home to a dinner reservation at 6 p.m, at a chosen restaurant. This prior art system would then interact with known vehicle navigation functionality (e.g. GPS), and also with the restaurant=s reservation function.

- [9] However, as identified in the Background, the prior art scheduling systems have two perceived shortfalls. First, the prior art systems do not accommodate the user who wishes to have a schedule with multiple destinations or activities in their travel schedule. Instead they are limited to one chosen location or activity. Second, the prior art systems require that the user knows ahead of time their specific travel intentions: the user must select the destination or activity they wish to travel to or attend. The prior art systems lack the ability to prepare a travel schedule for a user who does not have a pre-determined idea of specific activities or locations to visit.
- [10] Therefore, according to the claimed invention, a travel schedule system is disclosed which automatically prepares a travel schedule which incorporates multiple activities or locations for the user to visit, and does so based solely on broad user requirements. In operation, the terminal device receives input of a user=s desired destination and arrival time criteria. The terminal then uses these criteria to select one of a plurality of basic schedule patterns, called basic frames, which were previously stored in the memory. The basic frame includes a list of proposed activities to visit, arranged in a particular order. For example, as described in the application, a sample basic frame for a schedule includes the activities of AWalk, Lunch, Sightseeing, Dinner@. The basic frame selected is one which fits the user input criteria (destination and arrival time).

- [11] To complete the preparation of the schedule, the terminal device will transmit the selected basic frame, and the user=s time and location information, to the host information processing center, which will then choose specific facilities to populate each activity in the basic frame. Facilities chosen by the information processing center are specific locations, addresses, or vendors that match the activities in the basic frame, such as a specific restaurant for dinner, or a specific amusement park, etc. The information processing centre will retrieve facilities from a database, make any necessary reservations for these facilities on behalf of the user, and complete the final prepared schedule. The final schedule is transmitted back to the terminal device, and comprises a list of appropriate, reserved facilities that match the proposed activities of the basic frame, in a sequential order.
- [12] A further refinement of the claimed system is to monitor the execution of the schedule, and to adjust the schedule based upon external conditions, such as changes in traffic or weather.

Claims

- [13] Claim 1, amended by the Applicant in response to the Final Action, is the only independent claim on file:
 - 1. A schedule set up management system, comprising: inputting
 a memory device for storing a plurality of basic
 frames;

frame preparing means for preparing a basic frame of aschedule including types of activities, and a transfer order, based on said destination information and said desired arrival time information; and

schedule preparing means for accessing a database to retrievespecific facilities fitting the activities of the basic frame, thereby preparing schedule in which intermediate and final specific facilities corresponding to the activities are specified.

- [14] Claims are purposively construed to understand their meaning and scope, and in order to determine the boundaries (or fences) of the monopoly being sought by the applicant. A purposive construction takes into account what a person skilled in the art would understand, from the whole of the specification, to be the intent of the inventor=s words used in the claim, based on an understanding of the purpose of the invention and the problem the invention sought to address. The meaning of both Abasic frame@ and Aframe preparing means@ warrant specific consideration in this regard.
- [15] First, the applicant, in their response to the SA, argues the term Abasic frame@ is understood to mean a Arough outline of a schedule@ or equivalently Abasic details of a schedule@. page 9 of the description, a basic frame is referred to as a Abasic frame pattern@. On page 11, with reference to Figure 7, a basic frame selected from stored patterns includes a day trip composed of Awalk, lunch, amusement park and night view@. These are the Atypes of activities@ that together comprise one of the basic frame patterns stored in the memory of claim 1. Figure 8 provides another example of a basic frame: A1. Theme Park, 2. Lodging, 3. Aquarium, 4. Lunch, and 5. Art Gallery@, comprising five different types of activities. The numbers indicate the order of transfer, which is understood to be the chronological order in which the activities are to be completed when following the schedule. Therefore, the Board understands that a basic frame of a schedule is a rough outline of a schedule,

comprising general activities, events, or points of interest for a user to visit.

- [16] Second, it is necessary to determine what a skilled person would understand the inventor to mean in defining Aframe preparing means for preparing a basic frame@ in the apparatus of claim 1. The applicant contends in the response to the SA that Apreparing a basic frame@ in claim 1 means Apreparing a rough outline or preparing basic details of an agenda, where the rough outline or basic details relate to what activities to do, and when or in what sequence the activities should be done@. This statement accords with the Board=s understanding of Abasic frame@ as discussed above [para.15], but does not clarify our understanding of the meaning of Apreparing@.
- [17] Page 9 of the description states A...the basic frame preparation is performed by selecting a pattern fitting the input requirement from among multiple basic frame patterns stored in a memory unit@. Later, on page 11, the description further states that Aa basic frame of a schedule is prepared by selecting the basic frame from predetermined basic frame patterns fitting the input requirements@ where the frame is Aselected from among multiple basic frame patterns stored beforehand in memory unit 1c@. Reference is made to Figures 7, 8 and 9 of the application. The description highlights that the frame preparing means directly interacts with the stored patterns in the memory device in order to prepare a basic frame. It is only through the selection of one of the pre-stored frames which Afits@ the user requirements, that the frame preparing means operates to produce a schedule. No other alternative explanations of frame preparing are disclosed nor understood from a purposive reading of the specification.

- [18] In view of the above, the skilled person would understand that the solution to the technical problem of preparing a basic frame involves the cooperation of a) the memory device having the pre-stored basic frame patterns; and b) the frame preparing means to select one of these pre-stored patterns which (best) fits the user requirements. These two elements and their inter-relationship are understood as being essential to the solution contemplated by the inventors.
- [19] In reading claim 1, however, this relationship is not clearly defined. The frame preparing means does not explicitly select one of the pre-stored basic frames, nor does the memory device materially co-operate with the frame preparing means.

 However, the Board notes that claim 2 does accurately define that the frame preparing means selects one of the plurality of pre-stored frames in the memory which Afits@ the user requirements. As discussed above [para. 18], this is the essential feature of the solution disclosed by the inventors to prepare the basic frame. Having understood the purpose of the invention, the solution discussed, and the meaning of the language of the claims, it is evident that claim 2 explicitly defines the correct scope of Apreparing a basic frame@ as disclosed by the present application, whereas claim 1 is unclear on this critical point.
- [20] In Whirlpool Corp. v. Camco Inc., 2000 SCC 67, at para. 49, the Court, speaking on the appropriateness of purposive construction, stated that:

The words of the claims are initially proposed by the applicant, but they are thereafter <u>negotiated</u> with the Patent Office, and in the end are accepted by the Commissioner of Patents as a correct statement of a

monopoly that can properly be derived from the invention disclosed in the specification. (emphasis added)

As the present claims have not yet been granted and are still under negotiation with the Commissioner of Patents, avoidable ambiguity such as that caused by the language of claim 1 ought to be remedied prior to grant, for compliance with subsection 27(4) of the Patent Act. Therefore, the Board finds that claim 2 requires amendment to be recast as an independent claim, and that present claim 1 should be deleted. The resulting independent claim (previous claim 2) will clearly and explicitly define that the frame preparing means selects one basic frame of the plurality of frames pre-stored in the memory device which fits the user input destination and desired arrival time information. Accordingly, the obviousness analysis which follows will reference the matter of claim 2 as if it were the independent claim.

- [21] Dependent claims 3-6 define additional limitations to the features of the system defined in the independent claim. Claim 3 defines system architecture, in that the input and frame preparing means are in a terminal device, the schedule preparing means are in a host (central) device, and there is a communication line between the two; claim 4 defines display and touch means in the terminal device; claim 5 defines means to find an optimal route for the schedule using map data, and claim 6 defines power saving techniques for the communications line.
- [22] Claim 7 adds a further concept to the schedule set up management system:
 - 7. A schedule set up management system in accordance with Claim 1, further comprising:

a watching center for watching the implementation of said schedule, wherein said schedule preparing means re-prepares a schedule based on information from said watching center.

- [23] The watching center is understood to be means which monitor the implementation of the prepared schedule while it is being followed by the user. The watching center will re-prepare the previously prepared schedule depending on external factors such as road conditions or weather conditions which may impact the implementation of the prepared schedule.
- [24] Claims 8-10 define further refinements pertaining to the watching center functionality. Claims 8 and 9 pertain to obtaining traffic and weather information, and claim 10 defines means to evaluate the degree of impact, or significance, of the watching center information on the schedule. Rainy weather, for example, has more impact on an outdoor walk activity than it does on an indoor concert activity.
- [25] The Board notes that claim 8 lacks an antecedent for the term A...the intermediate <u>locations</u>...@. Claim 8 depends (through claim 7) on independent claim 1. Claim 1 originally defined Atypes of intermediate and final locations@, but in response to the Final Action, the claim was amended to define Atypes of activities@. This results in the lack of antecedent in claim 8. Therefore, amendment of claim 8 is necessary to render it compliant under subsection 27(4) of the Patent Act.

Issue

[26] The Board reviews the Examiner=s rejection of the application on the following grounds:

- claims 1-6 are obvious in light of the teaching of Garback (D1); and
- claims 7-10 are obvious in light of the teaching of D1 and Martin et al. (D2).

Prior Art Relied Upon

[27] The Examiner relies on the following prior art:

D1: United States patent 5,237,499 17 August 1993

D2: United States patent 5,272,638 21 December

1993

Mart

Garba

in et al.

- [28] D1 teaches a computer based travel planning system designed to process travel requests from individual members of a sponsored group (e.g. a company or organization), said members travelling to a specific venue. The system is designed to allow an individual business traveller to efficiently and effectively book an itinerary for a specified venue, such as a meeting or conference, while complying with certain organizational constraints. These constraints include both the company=s travel policy, such as preferred airline or hotel providers with pre-negotiated rates, and also the member=s preferences for travel, such as seat selection or hotel choice, for example.
- [29] D2 teaches a system to select a travel route based on selected performance criteria from a plurality of possible travel routes connecting a plurality of destinations. A user enters input data describing the specific locations of each destination to be visited, and the system calculates the optimal solution, such as shortest route to travel. The system also allows for the

re-planning and rescheduling of the travel route based on changing road conditions.

Obviousness

1. Examiner=s position:

- [30] The Supplemental Analysis (SA) provided to the applicant states that claim 1 is obvious in view of D1, as D1 discloses or teaches all of the main features, namely:
 - \$ input means (terminal 22) to enter time and location information (figure 3);
 - \$ a memory device with plurality of basic frames (database 12, with venue file 14);
 - \$ frame preparing means (col 2, line 29: venue file description), including types of activities (venue file includes flights, hotels, and car rentals); and
 - \$ schedule preparing means with specific facilities (col 6, line 24, col 5 line 30, figure 4: airline, hotel and car rental reservation details).

The SA concludes that the only substantive difference between claim 1 and D1 is the feature of a transfer order.

- [35] In response to some of the Applicant=s specific arguments, the SA explains that:
 - \$ a Atransfer order@ would have been obvious to a person skilled in the art, as an itinerary or schedule has an associated order of events according to when events are to occur;
 - \$ preparing a basic frame of types of activities is taught
 by D1 since the venue file contains activities such as
 flights, hotels and car rentals;
 - \$ intermediate and final specific facilities are known from D1 since the start and end times of meetings and events

are stored in the venue file; therefore, one would know which are intermediate and which are final; and

\$ the specific categories of activities are not defined in the claim, and since the type of activities cannot patently distinguish the claim, then the airline, hotel, and car rental of D1 are equivalent types of activities.

2. Applicant=s position:

[40] The applicant provides counterpoints to most of the statements raised in the SA. To summarize the points pertinent to the issue at hand, the applicant argues that:

\$

Apreparing a basic frame of a schedule@, when construed, means preparing a rough outline of a schedule. In D1, the venue file is for events that are already scheduled and thus contains information for such pre-scheduled events (start date, end date, address of meeting, etc); thus it does not pertain to preparing a basic frame of a schedule;

- \$ in D1, it is the <u>user</u> of the terminal device who does the actual scheduling, since the user enters data into a pre-formatted screen, including departure and return times. Therefore, the system of D1 is designed so as to have the user perform the initial scheduling. In contrast, the device of claim 1 prepares the initial schedule using frame preparing means; and
- \$ performing specific hotel or car rental bookings from pre-approved vendors as done by the system in D1 does not

teach preparing a basic frame of a schedule, since there is no schedule associated with checking into a hotel or picking up a car.

[44] Applicant=s main contention common to each of the three points above is that D1 fails to disclose or teach preparing a basic frame of a schedule. As stated on page 5 of the response to the SA, the applicant submits that Aa skilled reader, merely having regard to a system which makes specific reservations and contains pre-scheduled event details (as taught by Garback), would require inventive ingenuity to develop a system which prepares a basic frame of a schedule@

3. Principles of law:

- [45] Section 28.3 of the *Patent Act* sets out the conditions under which a claim is found to be obvious:
 - 28.3 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.
- [46] In Sanofi, the Supreme Court set out the approach to follow in the assessment of obviousness, which involves four steps:
 - (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?
- [47] In the *Practice Notice on Obviousness* released on 02 November 2009, the Office set out its practice on obviousness in light of the approach taken in *Sanofi*.

4. Analysis:

[48] The analysis will focus on the question of obviousness of the independent claim, in view of the matter taught by D1. D2 was cited by the examiner to address the additional feature of the watching centre in claim 7, and does not provide information beyond that of D1 as regards the independent claim. Therefore, D2 does not impact our assessment of the differences between the state of the art and the inventive concept at step 3, and thus does not affect our conclusions regarding the patentability of the present claims.

Step (1)(a): The person skilled in the art

[49] In the SA, the person skilled in the art is characterized as A...skilled in the fields of travel planning and computing systems such as in-vehicle driver information systems and computerized travel booking systems@. The Applicant does not comment on this statement, and the Board accepts this definition. We further characterize Askilled in the field of computing systems@ as including the skills of a team including

software programmers, computer hardware designers, and data communication technicians.

Step (1) (b): The relevant common general knowledge

- [50] The SA provides several statements regarding the relevant common general knowledge (CGK) possessed by the person skilled in the art:
 - a) the skilled person would be aware of prior art methods for automatically planning and scheduling travel bookings for a user;
 - b) such a skilled person is capable of programming a general purpose computing system, comprising a terminal device, central host computer and database; and
 - c) the skilled person is also aware of in-vehicle driver information systems, in particular, the use of such systems for travel route re-planning and rescheduling according to changing road conditions.
- [51] The Applicant did not comment on these statements, and the Board considers each of these to be reasonable.
- [52] Regarding points (a) and (c), the Board notes that the reasoning of the examiner is supported by the Background of the application. It discloses that travel information systems, such as in-vehicle navigation devices, were known to perform a variety of services, such as restaurant reservations. Furthermore, it is disclosed that it was known to have such systems monitor for external conditions, such as traffic congestion, and adapt reservations as necessary. As admissions made by the Applicant in the application as to the prior art or common general knowledge are treated as binding on the Applicant (Merck & Co., Inc. v. Pharmascience, Inc., 2010 FC 510, at para. 8), the Board considers these features to be part of the CGK.

[53] Regarding point (b) above, the Board notes that the examiner=s conclusion is supported by the lack of disclosure of any specific programming or software code in the description, which confirms that the applicant considered the programming of the functionality as disclosed in the application to be CGK.

Step (2): The Inventive Concept

- [54] The SA states that the Ainventive concept of the claims relates to the preparation of a schedule based on a transfer order and based on user input of types of activities, destination information and arrival time. @ The Applicant does not provide any comment on this statement.
- [55] The Board notes three issues with this inventive concept that require consideration. First, as previously discussed in paragraph 15, the transfer order is the chronological order of events in a schedule, and a person skilled in the art would know that multiple events or activities of a schedule would be listed in the order they are scheduled to occur. It would not, therefore, appear to form part of the inventive concept. Secondly, the A...user input of types of activities...@ identified above is not a feature recited in claim 1, nor can it be reasonably understood from the description as being part of the inventive concept of claim 1. Claim 1 recites user input of destination and desired arrival time information, but does not recite user input of activities. Finally, the Board notes that based on the construction of claim 1 discussed in paragraphs 14-19, the inventive concept of claim 1 must also take into account the Aselecting@ aspect of Apreparing of a basic frame.@
- [56] For the three abovementioned reasons, and in consideration of the guidance provided in the *Practice Notice on Obviousness*,

relating the inventive concept to a solution to a technical problem, the inventive concept is revisited by the Board as follows:

- [57] The prior art in schedule planning did not allow a user to obtain a schedule with multiple activities based only on a limited idea by the user as to where and when they wished to travel. the apparent technical problem facing the inventor was how to modify a known travel scheduling device to prepare a schedule with multiple activities based on broad user input of arrival time and destination information. The solution to this technical problem involves incorporating pre-stored patterns or rough outlines of a schedule in a memory, and then selecting a stored basic frame from that memory based on the fit with the user=s input criteria of at least an arrival time and destination, so as to prepare an initial rough outline of a schedule. The basic frame selected is then used in a known or conventional manner to obtain detailed reservations with specific facilities for the selected multiple activities, so as to produce a final, detailed schedule.
- [58] Therefore, the Board understands the inventive concept of claim 1 to be a computer-implemented scheduling system, specifically configured with a computer memory device containing a plurality of pre-stored basic frame patterns of a schedule (basic frames), and means for preparing a rough outline of activities by selecting one of the pre-stored basic frame patterns that matches a user=s desired arrival time and destination requirement.

Step (3): Differences between the Astate of the art@ and the inventive concept

Facts from D1 (Garback):

- [59] The technical implementation in D1 involves a local computer terminal at which the user enters their travel request; a remote central processing unit (CPU) host in communication with the local terminal, to perform reservation processes with known airline, hotel and car rental reservation systems; commonly known data communication links to connect all parties; and finally, a database connected to the CPU host which stores pertinent information for booking the travel reservations in five main files: a city decode file, a ticketing file, a group member file, a travel policy file, and a venue file.
- [60] The city decode file, ticketing file and travel member file are not germane to the issue of obviousness before the Board, and do not need further discussion.
- [61] The travel policy file (see col. 2 line 40) contains information on pre-selected airline carriers, pre-selected hotel room providers, and pre-selected ground transportation. These are negotiated by the organization on a cost-saving basis, given that for a specific venue, the organization can guarantee certain number of travellers, and thus obtain discounts. Thus the data in the file serves as constraints to travel bookings, where any reservations made by the system for a particular venue are limited to vendors in this file.
- [62] Finally, the database in D1 contains the venue file. From the description (col 2 line 29, and col 4 line 11), the venue file contains information about a specific venue for which a number of individual travellers from the same sponsoring organization are making travel arrangements. A venue will be a meeting, a seminar, a convention, a training program, etc. The venue file will therefore include information such as the date on which the event begins, the end date, the city location of the venue, and the venue address.

- [63] Once a venue is identified by an organization for attendance by one or more of its employees, a venue file is created with the abovementioned data entered. Likewise, once this venue is identified, a travel policy file will be created to list the preferred vendors, based on negotiated travel discounts, for that particular venue.
- [64] In operation, a user at the local terminal initiates the reservation process by filling out the screen inputs (see Figure 3) which will format a temporary electronic Atravel request@ The user enters their employee code, the venue code, the departure and destination cities, and finally, their chosen departure and return dates, hotel and car request inputs, and any other personal requests. Once the data entered is verified as correct by the user, the data in the travel request is sent from the terminal to the CPU host. The CPU will then perform the necessary reservation processing steps based on the data sent to it in the travel request file, and the data stored in the database files. This ensures that each user=s travel reservations are in conformity with the venue file information (e.g. date and location of venue) and also the travel policy (pre-negotiated flights, for example). The system takes a user=s request and applies organizational travel constraints.

Differences between the Inventive Concept and D1

- [65] There are two key differences:
 - i. memory device with plurality of stored patterns
- [66] The database in D1 is configured differently from the memory in claim 1. The database contains five specific folders which store constraint data for the travel system to perform reservations for a specific, pre-determined venue. This data is only created and stored after a venue is identified by the

organization. There is no pre-storing of a plurality of venue files that would be equivalent to the plurality of pre-stored basic frames.

- [67] The data in the database of D1 (e.g. venue or travel policy data) is retrieved by the CPU host after a user submits their electronic travel request. Even when the database of D1 is required to store several venue files (such as for multiple conferences), these are accessed separately by the CPU host based only on the venue code received in the request file. The database of D1 is not equivalent to a memory device arranged as a plurality of searchable stored patterns or rough outlines of a schedule.
 - ii. frame preparing means selecting a stored frame based on user input
- [1] The venue file of D1 is simply a data file; it is not an executable file or code means functional to retrieve other data from a memory based on a match with input criteria. The venue file contains data unique to a specific, pre-determined venue; the venue file is not selected to match a user=s input time and location. Further, the venue file does not perform a selecting function to match user inputs with a stored pattern. Finally, the venue file does not display or produce an outline of activities in a sequential order, equivalent to a basic frame.
- [2] Furthermore, to extend the analysis of D1, the Board notes that the travel request file (and its associated input screen Figure 3), when combined with the venue file, does not disclose a frame preparing means selecting a stored frame based on user input. The travel request file is populated by user input on a fixed format screen (one Aframe@). No means to prepare a schedule result from the combination, since the user enters schedule data into the request file, and the travel request file does not

perform any selecting function to match the user entered data with a stored list of pre-stored patterns. Instead, the travel request file is a temporary file which once completed, is transmitted to the CPU host.

- [3] Therefore, the difference over the state of the art is the inventive concept itself, i.e. a computer memory device containing a plurality of pre-stored basic frame patterns of a schedule, and means for preparing a rough outline of activities by selecting one of the pre-stored basic frame patterns that matches a user desired arrival time and destination requirement.
- (4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious?
- [4] Having identified the differences that exist between the state of the art and the inventive concept, the Board must now consider whether said differences would have been obvious to the person skilled in the art at the time of the invention. One must consider if the skilled person would achieve the differences identified (in this case, the inventive concept itself) without the need of ingenuity. One must be cognizant to avoid using the present application in evaluating those differences, i.e. to avoid using hindsight to arrive at the same solution.
- [5] In this particular case, even if faced with the technical problem of modifying a system to enable it to prepare a travel schedule based on only general user requirements, the facts of D1 combined with the skilled person=s CGK do not appear to give sufficient direction to arrive at the identified differences. As discussed previously, neither the venue file nor the travel request file of D1 is arranged to store a plurality of searchable stored patterns or rough outlines of a schedule. Furthermore, neither the venue file nor the travel request file (and its

associated interface screen) of D1 have the inherent functionality to prepare a frame by selecting a frame from memory which matches a user=s input criteria. as defined in the independent claim.

- [6] To arrive at the combined functionality of the differences of step 3 would require a fundamental or material change in the purpose and design of the data processes and system arrangements that exist in the travel reservation system of D1. The Board considers that the changes necessary to the design of D1 would require a degree of creativity which would be beyond that found in the ordinary skills of the person skilled in the art. The Board finds nothing in the teaching of D1 (nor D2; see para. 37) that would direct said person to make these design changes, nor to direct said person to contemplate a system with the functionality of these differences.
- [7] As stated at the outset, the concept for the present invention is generally equivalent to the automation of the functions of a trip planner or tourist advisor. Simply conceiving of the idea to automate some of the planner functions would not itself be sufficient for a valid patent (nor is it the situation in this case). Likewise, once the specific solution of claim 2 is identified, the reduction to practice into a specific software implementation is also not the invention, but part of the CGK of the skilled team. Instead, the inventive advance in the present application manifests itself in the identification of the specific technical implementation that would realize said automated functionality. While there may be several possible solutions that could be identified and implemented to realize the idea of automating the trip planner functionality, the inventive concept of the present application lies in the identification of one.

[8] Based on the facts of this case and the prior art of record, the Board concludes that inventive ingenuity would be required in a skilled person to conceive of the present solution and thus to implement a system having the functionality of the claimed apparatus. The Board finds there is insufficient direction in the prior art or CGK for the skilled person to arrive at the solution to store a plurality of rough outlines of a schedule in a memory device, and further to select one of the pre-stored patterns to prepare a basic frame of a schedule based on a match with user input of arrival time and destination information without inventive effort. While the implementation of this solution, from a technical standpoint, could be trivial for a skilled person once directed to do so, there is no apparent suggestion or impetus for the skilled person to implement such a solution. As stated in Bayer Aktiengesellschaft v. Apotex Inc. (1995), 60 C.P.R. (3d) 58 at 84 (Ont.Ct.Gen.Div.):

AInventiveness, however, may be present notwithstanding that there was no difficulty putting an idea into effect once it was conceived. An invention is not to be considered obvious because of its simplicity.@

In this case, the apparently simple solution is nevertheless a solution which would not have been obvious.

[9] Therefore, the Board considers that claim 2, written in independent form, defines an inventive step over the state of the art, and is not obvious. As the remaining claims 3-10 all depend from this claim, they are also not obvious. The particular relevance of D2 to the additional feature of dependent claim 7 is therefore moot.

Recommendation

- [10] In view of the above findings, the Board recommends that:
 - 1. The Examiner=s rejection of the application for non-compliance with subsection 28.3 of the *Patent Act* be overturned;
 - 2. The Applicant be informed, in accordance with subsection 31(c) of the *Patent Rules*, that the following amendments of the application are necessary for compliance with the *Patent Act*:
 - (1) claim 2 be reworded in independent
 form;
 - (2) claim 1 be deleted;
 - (3) claim 8 be amended to replace the term Athe intermediate locations@ with the term Athe intermediate facilities@ (2 instances); and
 - (4) all claims be renumbered accordingly.
 - 3. The Applicant be advised that if the above amendments, and only the above amendments, are not made within the specified time, the Commissioner intends to refuse the application.

Andrew Strong
Member

Mark Couture Member Paul Sabharwal Member

Decision

[11]

I concur with the Patent Appeal Board=s finding that the application complies with subsection 28.3 of the Patent Act and its recommendation that the application be allowed to grant with the following, and only the following, amendments to be made in accordance with subsection 31(c) of the Patent Rules within 3 months from the date of this decision, and that failing that, I intend to refuse this application:

- 1. claim 2 be reworded in independent form;
- 2. claim 1 be deleted;
- 3. claim 8 be amended to replace the term Athe intermediate locations@ with the term Athe intermediate facilities@ (2 instances); and
- 4. all claims be renumbered accordingly.

Sylvain Laporte
Commissioner of Patents

Dated at Gatineau, Quebec, this 8th day of June, 2012