

DOCUMENT MADE AVAILABLE UNDER THE PATENT COOPERATION TREATY (PCT)

International application number:	PCT/US2014/049979
International filing date:	06 August 2014 (06.08.2014)
Document type:	Certified copy of priority document
Document details:	Country/Office: US
	Number: 61/862,850
	Filing date: 06 August 2013 (06.08.2013)
Date of receipt at the International Bureau:	16 August 2014 (16.08.2014)

Remark: Priority document submitted or transmitted to the International Bureau in compliance with Rule 17.1(a),(b) or (b-bis)

648037

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

August 15, 2014

THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM THE RECORDS OF THE UNITED STATES PATENT AND TRADEMARK OFFICE OF THOSE PAPERS OF THE BELOW IDENTIFIED PATENT APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A FILING DATE.

APPLICATION NUMBER: *61/862,850*

FILING DATE: *August 06, 2013*

RELATED PCT APPLICATION NUMBER: *PCT/US14/49979*

THE COUNTRY CODE AND NUMBER OF YOUR PRIORITY APPLICATION, TO BE USED FOR FILING ABROAD UNDER THE PARIS CONVENTION, IS *US61/862,850*



Certified by

David J. Kappas

Under Secretary of Commerce
for Intellectual Property
and Director of the United States
Patent and Trademark Office

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

Provisional Application for Patent Cover Sheet					
This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c)					
Inventor(s)					
Inventor 1					<input type="button" value="Remove"/>
Given Name	Middle Name	Family Name	City	State	Country ;
Harold	Roy	Miller	Toronto		CA
Inventor 2					<input type="button" value="Remove"/>
Given Name	Middle Name	Family Name	City	State	Country ;
Dr. L.	James	Valverde, Jr.	Washington	DC	US
Inventor 3					<input type="button" value="Remove"/>
Given Name	Middle Name	Family Name	City	State	Country ;
Jonathan		Miller	Toronto		CA
All Inventors Must Be Listed – Additional Inventor Information blocks may be generated within this form by selecting the Add button.					<input type="button" value="Add"/>
Title of Invention		Travel Booking Platform			
Attorney Docket Number (if applicable)		PA6445PRV			
Correspondence Address					
Direct all correspondence to (select one):					
<input checked="" type="radio"/> The address corresponding to Customer Number			<input type="radio"/> Firm or Individual Name		
Customer Number			22830		

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.	
<input checked="" type="radio"/> No.	
<input type="radio"/> Yes, the name of the U.S. Government agency and the Government contract number are:	

Entity Status					
Applicant claims small entity status under 37 CFR 1.27					
<input checked="" type="radio"/> Yes, applicant qualifies for small entity status under 37 CFR 1.27 <input type="radio"/> No					
Warning					
Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.					
Signature					
Please see 37 CFR 1.4(d) for the form of the signature.					
Signature	/Keith Kline/			Date (YYYY-MM-DD)	2013-08-06
First Name	Keith	Last Name	Kline	Registration Number (If appropriate)	32737
This collection of information is required by 37 CFR 1.51. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. This form can only be used when in conjunction with EFS-Web. If this form is mailed to the USPTO, it may cause delays in handling the provisional application.					

TRAVEL BOOKING PLATFORM

TECHNICAL FIELD

[0001] The present disclosure relates generally to methods and systems for booking travels, and more particularly to methods and systems for booking travel itineraries with a cancel or modification option.

BACKGROUND

[0002] Itinerary pricing may depend on numerous factors, most importantly the time to the departure and whether reservations can be refunded. Typically, earlier and nonrefundable reservations are better priced. However, purchasing such reservations requires preliminary planning which is not always possible, especially in a business environment.

[0003] Additionally, browsing through available itineraries and selection of an itinerary may take some time. In some cases, when the itinerary is selected, it may be no longer available or available at a higher price.

BRIEF DESCRIPTION OF THE DRAWINGS

[0004] Embodiments are illustrated by way of example and not limitation in the figures of the accompanying drawings, in which like references indicate similar elements and in which:

[0005] FIG. 1 illustrates an environment within which systems and methods for

guaranteeing a price of an itinerary can be implemented, in accordance with some embodiments.

[0006] FIG. 2 illustrates procedures associated with an itinerary generation based on input of a customer, in accordance with some example embodiments.

[0007] FIG. 3 illustrates procedures associated with selling a locked itinerary to a customer, in accordance with some embodiments.

[0008] FIG. 4 illustrates procedures associated with cancelling an itinerary upon request of a customer, in accordance with some example embodiments.

[0009] FIG. 5 is a process flow diagram showing a method for guaranteeing a price of an itinerary, in accordance with some embodiments.

[0010] FIG. 6 shows a diagrammatic representation of a computing device for a machine in the exemplary electronic form of a computer system, within which a set of instructions for causing the machine to perform any one or more of the methodologies discussed herein can be executed.

DETAILED DESCRIPTION

[0011] The following detailed description includes references to the accompanying drawings, which form a part of the detailed description. The drawings show illustrations in accordance with exemplary embodiments. These exemplary embodiments, which are also referred to herein as “examples,” are described in enough detail to enable those skilled in the art to practice the present subject matter. The embodiments can be combined, other embodiments can be utilized, or structural, logical, and electrical changes can be made without departing from the scope of what is claimed. The following detailed description is, therefore, not to be taken in a limiting sense, and the scope is defined by the appended claims and their equivalents.

[0012] Planning a travel may be difficult and time-consuming. Purchasing an entire itinerary (e.g., flight ticket, hotel reservation, and car rental) may be also complicated because some items may be no longer available or unavailable at the quoted price while other itineraries are reviewed.

[0013] Another aspect of the present disclosure is related to possible savings and losses associated with early bookings and subsequent cancellations. Pricing schemes for air fares, hotels, car rentals, and other travel-related services may allow significant savings in case of an early booking. However, the longer the period before a planned departure date, the more probable is a plan change resulting in a cancellation or a modification of the itinerary. Cancelling or modifying the itinerary may result in losses up to 100% of the money paid.

[0014] Methods and systems described herein allow locking a price of an itinerary for a certain period of time in consideration of a payment. The itineraries may be searched based on travel attributes/requirements received from a customer and/or data retrieved from various sources, for example, social networks, travel history of the

customer, and the like. Itineraries may be generated according to the travel attributes. The itineraries may be provided to the customer together with an option to lock the price of the itinerary for a certain period of time. To use the option, the customer may be asked to make a payment. By making the payment, the customer ensures that the itinerary is still available at the quoted price within the period of time. Upon receiving of the payment from the customer, the system may purchase the itinerary and hold it until the customer purchases the itinerary. When the customer purchases the itinerary, the itinerary is sold to the customer at the quoted price.

[0015] Additionally, the customer may be provided with an option to modify the itinerary at an extra charge.

[0016] In some embodiments, to lock the itinerary, the system may charge the price of the itinerary and the payment for an option to otherwise modify the itinerary later. Without this payment, the itinerary may be nonrefundable or allow no modifications. Upon receiving a cancel/modify request, the system may refund the amount paid or modify the itinerary at an additional charge.

[0017] Customer historical data may be stored in a database. The historical data may be processed by the system to estimate the probability of a purchase or a cancellation/modification of the itinerary by the customer. Payments and/or extra charges may be adjusted based on the probability.

[0018] In some embodiments, historical data associated with all customers may be processed to adjust payments and/or extra charges of the customers.

[0019] FIG. 1 illustrates an environment within which the systems and methods for guaranteeing a price of an itinerary can be implemented, in accordance to some embodiments. Guaranteeing itinerary prices may be performed by a system for guaranteeing a price. The system may include a server-based distributed application, thus it may include a central component residing on a server and one or more client

applications residing on one or more user devices and communicating with the central component via a network. The customer may communicate with the system via a client application available through a user device.

[0020] The central component of the system may receive travel attributes from a customer and/or other customer data from various sources, which may include online directories, social networks, blogs, travel history, and so forth. The travel attributes and other customer data may be received over the network.

[0021] The travel attributes may be obtained by analyzing text, speech, and/or other data. The analysis may determine travel attributes, such as travel dates, desired locations, desired transportation, accommodation classes, and so forth. Based on the travel attributes, the system may generate an itinerary using data received from airlines, hotels, car rental agencies, and other sources. The itinerary may comprise various items, for example, one or more flights, rental cars, hotel rooms, and so forth. The items of the itinerary may be searched and adjusted by the system. The itinerary may be offered to the customer as a package. In such a way, time for planning a travel and searching various items may be reduced. Additionally, since the itinerary may be offered as a package, the price for the whole package may also be lower compared to the individual items of the itinerary bought separately.

[0022] FIG. 2 shows receiving input from the customer. The input may be parsed to extract travel attributes. The travel attributes may be used by a search engine to search for appropriate itinerary items. Based on the itinerary items, a travel engine may generate an itinerary. If the customer desires to be able to purchase the itinerary later with at the same price, the customer may make a payment in consideration of locking the price for future purchase.

[0023] When the payment is received from the customer, the itinerary may be purchased by the system. In some embodiments, the payment may be collected

together with the price of the itinerary. The customer may purchase the itinerary at the price within a predetermined time.

[0024] In some embodiments, the amount of payment may depend on the predetermined time for which the price is locked. For example, the payment for locking an itinerary price for an hour may be lower than the payment for locking the itinerary price for a day.

[0025] In some cases, the customer may reject the itinerary with the locked price and, optionally, introduce some adjustments to the travel attributes. Based on the adjustments if any, the system may generate another itinerary for the customer. If the customer is satisfied with the offered itinerary, he may pay for the modified itinerary and, in some embodiments, be charged a modification fee.

[0026] When the customer decides to purchase the itinerary, he may send a purchase request associated with the itinerary which is already purchased by the system as shown in FIG. 3. If the payment for the itinerary is not yet received from the customer, the system may collect the payment and finalize the sale. Thus, customers may enjoy both advantages of early bookings and associated savings, while minimizing possible losses resulting from cancellations and/modifications.

[0027] FIG. 4 shows procedures related to a cancellation. If the customer decides to cancel the locked itinerary, he may be charged an extra charge. If the price of the itinerary is paid by the customer, the payment amount may be refunded minus the extra charge. The payment for guaranteeing the price of the itinerary may not be refunded. However, the payment and the extra charge may still be smaller than the price of the itinerary. Thus, the customer may have travel costs partially refunded.

[0028] FIG. 5 is a process flow diagram showing a method for guaranteeing a price of an itinerary within the environment described with reference to FIG. 1. The method may commence with receiving travel attributes from a customer. In some cases, the

travel attributes may be obtained by analyzing customer input. Based on the attributes, itineraries may be generated. The itineraries may comprise packages of travel-related items. Thus, for example, the itinerary may include flights, rental cars, transfer arrangements, hotel rooms, tourist activities, and the like.

[0029] The generated itineraries may be provided to the customer. The itineraries may be associated with prices effective at the moment the itinerary is provided. The customer may be also provided with an option to lock the price of a selected itinerary for a predetermined time. To use the option the customer may make a payment. The predetermined time may be specified by the customer or selected by the customer from available options. Upon receiving the payment associated with one of the itineraries from the customer, the system may purchase the itinerary at the price. In some embodiments, the price may be charged to the customer.

[0030] Within the predetermined time, the customer may have an option to cancel or modify the itinerary. If the price is paid by the customer, it may be refunded after deduction of an extra charge for cancelling. If the customer does not use the option to cancel the itinerary within the predetermined time, the itinerary may be considered purchased by the customer. If the price of the itinerary is not paid by the customer, the price may be charged at the end of the predetermined period.

[0031] In some embodiments, a purchase request associated with the itinerary for which the price is locked may be received from the customer. Upon on the request, the itinerary may be sold to the customer. Additionally, the price of the itinerary and/or the payment, if not yet paid, may be received from the customer.

[0032] FIG. 6 shows a diagrammatic representation of a computing device for a machine in the exemplary electronic form of a computer system, within which a set of instructions for causing the machine to perform any one or more of the methodologies discussed herein can be executed. In various exemplary embodiments, the machine

operates as a standalone device or can be connected (e.g., networked) to other machines. In a networked deployment, the machine can operate in the capacity of a server or a client machine in a server-client network environment, or as a peer machine in a peer-to-peer (or distributed) network environment. The machine can be a personal computer (PC), a tablet PC, a set-top box (STB), a cellular telephone, a digital camera, a portable music player (e.g., a portable hard drive audio device, such as an Moving Picture Experts Group Audio Layer 3 (MP3) player), a web appliance, a network router, a switch, a bridge, or any machine capable of executing a set of instructions (sequential or otherwise) that specify actions to be taken by that machine. Further, while only a single machine is illustrated, the term "machine" shall also be taken to include any collection of machines that individually or jointly execute a set (or multiple sets) of instructions to perform any one or more of the methodologies discussed herein.

[0033] The example computer system includes a processor or multiple processors, a hard disk drive, a main memory and a static memory, which communicate with each other via a bus. The computer system may also include a network interface device. The hard disk drive may include a computer-readable medium, which stores one or more sets of instructions embodying or utilized by any one or more of the methodologies or functions described herein. The instructions can also reside, completely or at least partially, within the main memory and/or within the processors during execution thereof by the computer system. The main memory and the processors also constitute machine-readable media.

[0034] While the computer-readable medium is shown in an exemplary embodiment to be a single medium, the term "computer-readable medium" should be taken to include a single medium or multiple media (e.g., a centralized or distributed database, and/or associated caches and servers) that store the one or more sets of instructions. The term "computer-readable medium" shall also be taken to include any medium that

is capable of storing, encoding, or carrying a set of instructions for execution by the machine and that causes the machine to perform any one or more of the methodologies of the present application, or that is capable of storing, encoding, or carrying data structures utilized by or associated with such a set of instructions. The term "computer-readable medium" shall accordingly be taken to include, but not be limited to, solid-state memories, optical and magnetic media. Such media can also include, without limitation, hard disks, floppy disks, NAND or NOR flash memory, digital video disks, RAM, ROM, and the like.

[0035] The exemplary embodiments described herein can be implemented in an operating environment comprising computer-executable instructions (e.g., software) installed on a computer, in hardware, or in a combination of software and hardware. The computer-executable instructions can be written in a computer programming language or can be embodied in firmware logic. If written in a programming language conforming to a recognized standard, such instructions can be executed on a variety of hardware platforms and for interfaces to a variety of operating systems. Although not limited thereto, computer software programs for implementing the present method can be written in any number of suitable programming languages such as, for example, C, C++, C# or other compilers, assemblers, interpreters or other computer languages or platforms.

[0036] Thus, computer-implemented methods and systems for guaranteeing a price of an itinerary are described. Although embodiments have been described with reference to specific exemplary embodiments, it will be evident that various modifications and changes can be made to these exemplary embodiments without departing from the broader spirit and scope of the present application. Accordingly, the specification and drawings are to be regarded in an illustrative rather than a restrictive sense.

CLAIMS

1. A method for creating a travel itinerary, the method comprising:
 - receiving travel attributes from a customer;
 - based on the travel attributes, generating one or more itineraries;
 - providing to the customer the one or more itineraries and options to lock the price of the one or more itineraries for a predetermined period of time; and
 - receiving from the customer payment for the itinerary.

ABSTRACT

A method for guaranteeing a price of an itinerary is described herein. The method comprises receiving travel attributes from a customer. Based on the travel attributes, one or more itineraries may be generated. The itineraries may be provided to the customer together with options to lock the price of the itineraries for a predetermined time for a payment. A payment in consideration of locking the price for an itinerary may be received from the customer. Upon making the payment, the customer may be able to purchase the itinerary at the price within the predetermined time.

1/6

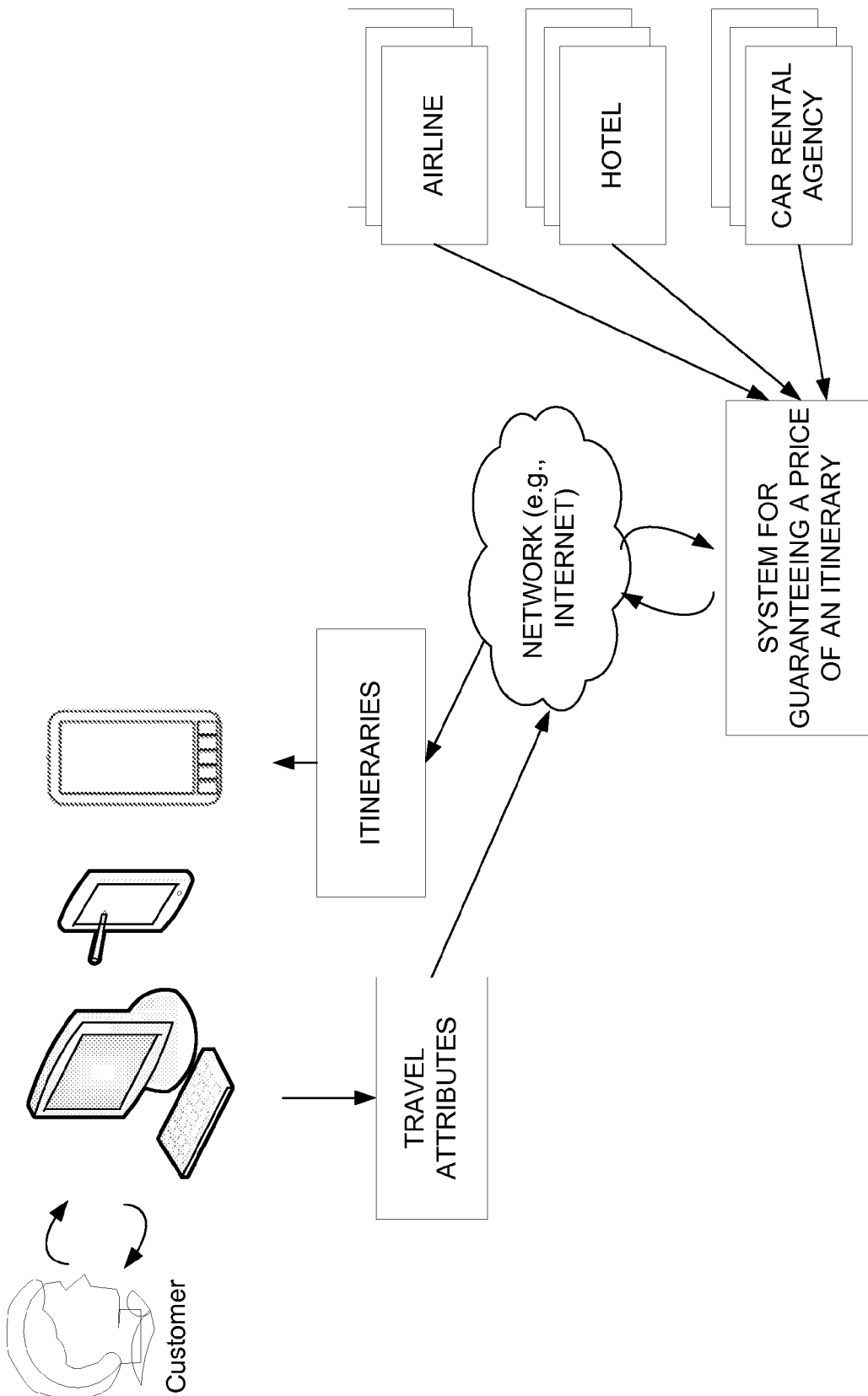


FIG. 1

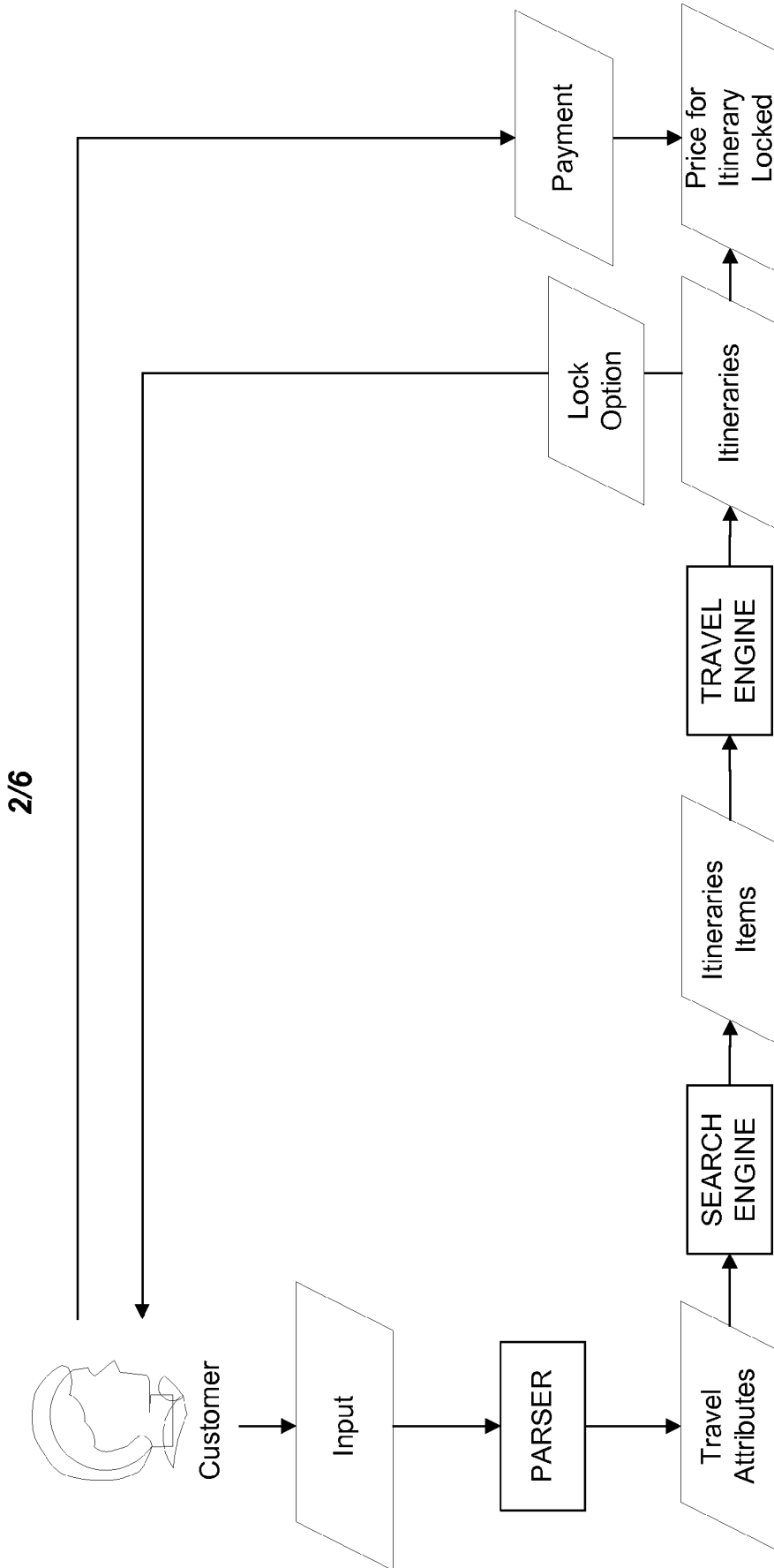


FIG. 2

3/6

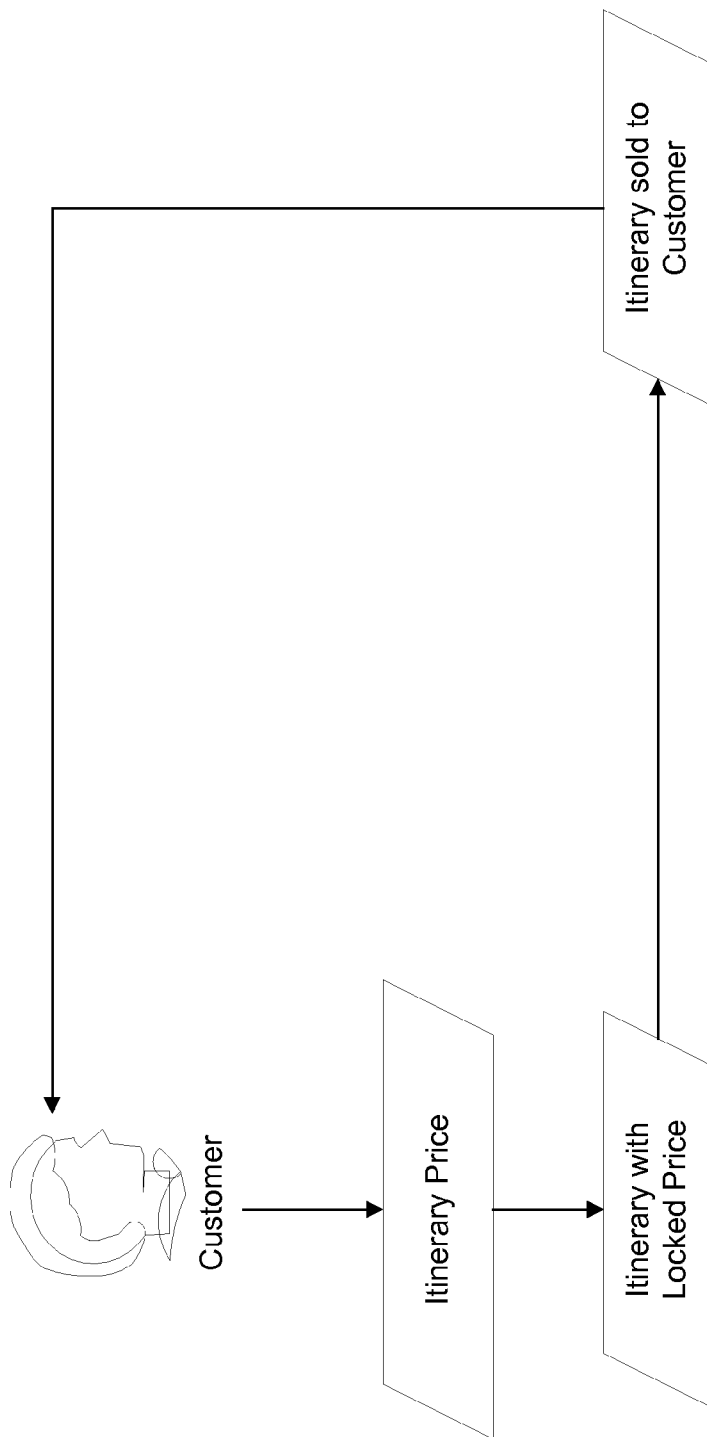


FIG. 3

4/6

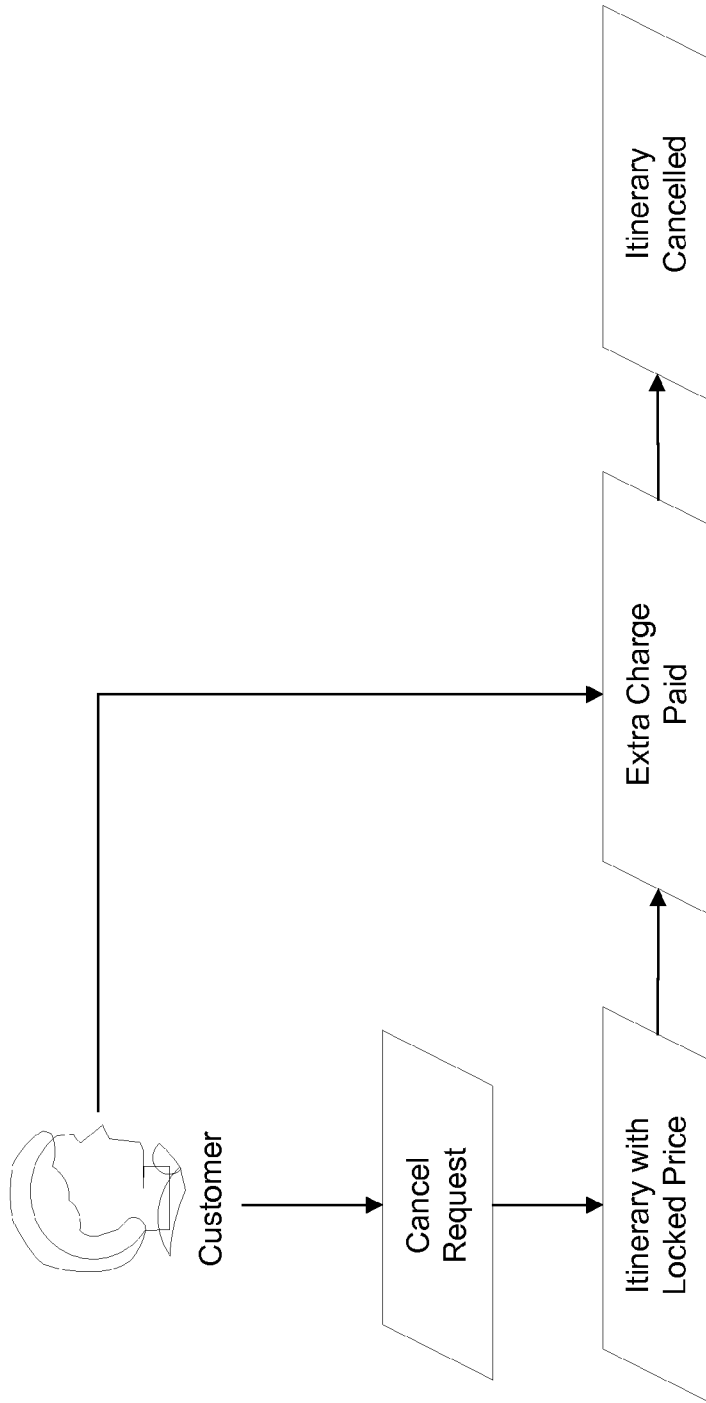


FIG. 4

5/6

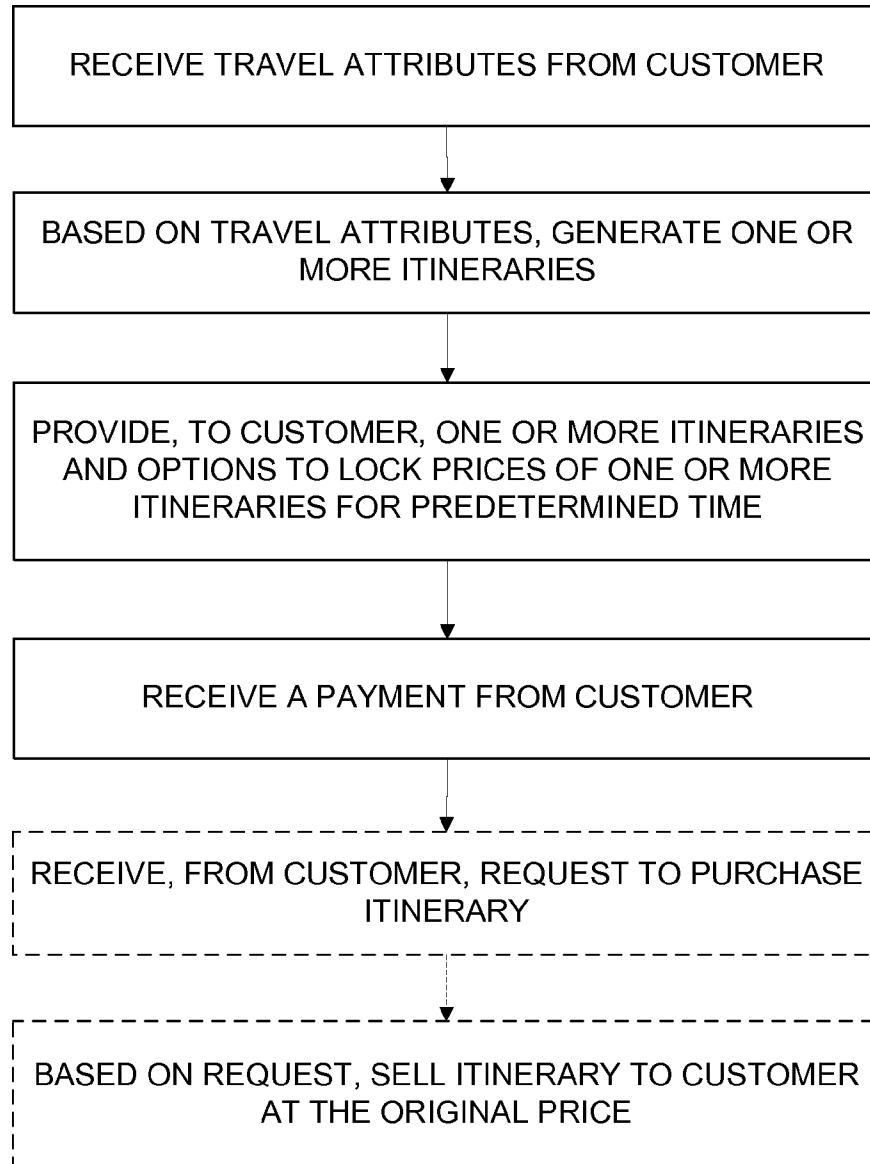


FIG. 5

6/6

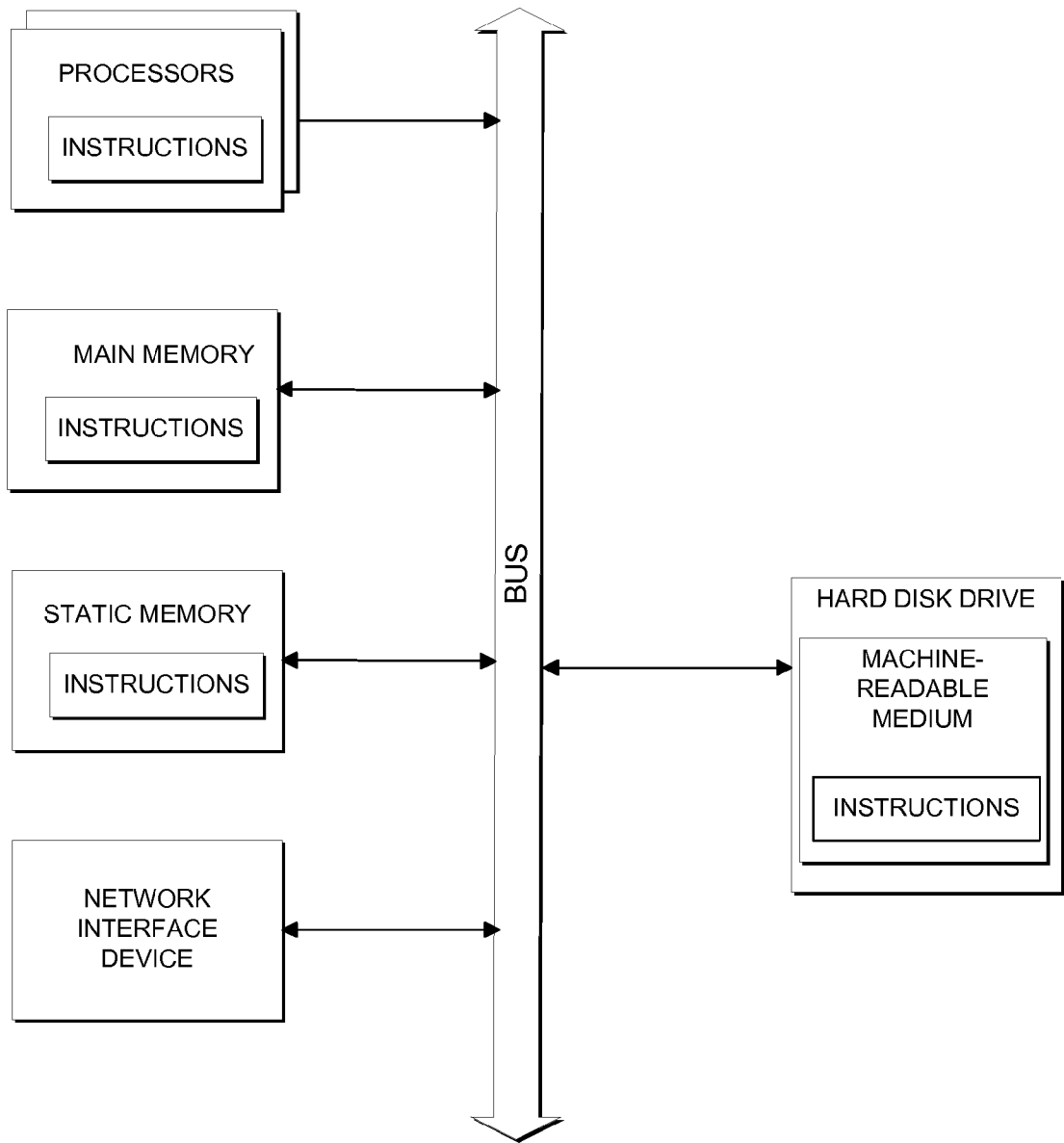


FIG. 6

Electronic Acknowledgement Receipt

EFS ID:	16516725
Application Number:	61862850
International Application Number:	
Confirmation Number:	7816
Title of Invention:	Travel Booking Platform
First Named Inventor/Applicant Name:	Harold Roy Miller
Customer Number:	22830
Filer:	Keith Earl Kline
Filer Authorized By:	
Attorney Docket Number:	PA6445PRV
Receipt Date:	06-AUG-2013
Filing Date:	
Time Stamp:	17:51:15
Application Type:	Provisional

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$130
RAM confirmation Number	5145
Deposit Account	060600
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Provisional Cover Sheet (SB16)	6445PRV_PRV_Cover_Sheet_SB _16.pdf	29268 0eb3e87985764d7a2970435fb645d9931ee8e83a	no	2

Warnings:

This is not a USPTO supplied Provisional Cover Sheet SB16 form.

Information:

2		6445PRV_Specification.pdf	108091 e80c8ef241973c06c76b68153495fe36ccfe6b2d	yes	11
---	--	---------------------------	--	-----	----

Multipart Description/PDF files in .zip description

Document Description	Start	End
Specification	1	9
Claims	10	10
Abstract	11	11

Warnings:

Information:

3	Drawings-only black and white line drawings	6445PRV_Figures.pdf	120610 4f8eed2e65bf4a608f95ecd01a25ec25a6cbda6b	no	6
---	---	---------------------	--	----	---

Warnings:

Information:

4	Fee Worksheet (SB06)	fee-info.pdf	29137 06a4ff093cf978229a07fb6a0042a27cf627423b2	no	2
---	----------------------	--------------	--	----	---

Warnings:

Information:

Total Files Size (in bytes):			287106		
-------------------------------------	--	--	--------	--	--

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.