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# SYSTEM AND METHOD FOR A PRIVATE VEHICLE SHARING SERVICE

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#### SYSTEM AND METHOD FOR A PRIVATE VEHICLE SHARING SERVICE

### FIELD

**[0001]** The present disclosure relates to a system and method for a private vehicle sharing service and, more particularly, to a private vehicle sharing service that provides a membership/subscription based payment plan.

## BACKGROUND

**[0002]** There are a number of presently available private vehicle sharing services that individuals can utilize. For example, one can utilize a taxi or other automobile sharing service to get from point A to point B. In such services, a user requests to be picked-up from an origination location and delivered to a destination location to complete a trip. Typically, the user will be charged based on the particular features of the trip, for example, the distance traveled, the elapsed time, the type of vehicle, and even the particular time of day for the trip (e.g., based on a level of demand) or a combination of these features. In some cases, e.g., with a typical taxi, the cost will determined only after completing the trip. In other situations, e.g., with a chartered bus or airplane, the cost will be determined in advance of the trip. In either case, however, the user is asked to pay on a per-ride basis, which inevitably leads to a cost-benefit analysis between the private vehicle sharing service and other, less convenient modes of transportation (walking, using his/her own vehicle or public transportation, etc.) for each trip.

**[0003]** It would be desirable to provide an alternative to these typical private vehicle sharing services that, e.g., allows a user to frequently utilize such a service and

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provides a higher degree of cost certainty, which may also increase the utilization of such services.

# SUMMARY

**[0004]** The present disclosure is directed to a subscription and/or membership based private vehicle sharing service. A user can purchase a subscription that allows the user to utilize the private vehicle sharing service for a particular amount of use over a given period. The unit measurement of the amount of use can be distance-based and/or tripbased. Further areas of applicability of the present disclosure will become apparent from the detailed description provided hereinafter. It should be understood that the detailed description and specific examples are intended for purposes of illustration only and are not intended to limit the scope of the disclosure.

# BRIEF DESCRIPTION OF THE DRAWINGS

**[0005]** The present disclosure will become more fully understood from the detailed description and the accompanying drawings, wherein:

**[0006]** FIG. 1 a diagram of an example computing network for implementing a private vehicle sharing service according to some implementations of the present disclosure;

**[0007]** FIG. 2 is a schematic diagram of an example user interface for a private vehicle sharing service according to some implementations of the present disclosure; and

**[0008]** FIG. 3 is a table representing an example data structure for storing the features of a private vehicle sharing service according to some implementations of the present disclosure.

# DETAILED DESCRIPTION

**[0009]** As mentioned above, current private vehicle sharing services have a number of disadvantages. In order to address these and other disadvantages, the present disclosure is directed to an improved private vehicle sharing service that allows users to obtain a membership or subscription to utilize the private vehicle sharing service for a particular amount of use over a given period.

**[0010]** The term "private vehicle" as used herein is intended to include any form of vehicle (automobile, motorcycle, airplane, helicopter, etc.) that can be used to transport a user on a trip from a first (origination) location to a second set of one or more (destination) locations. Further, and in contrast with public transportation, the private vehicle sharing service is intended to include only private transportation (taxis, rideshares, chartered transports, etc.) in which the transportation timetables or schedules are arranged by agreement between the user and the private vehicle sharing service provider. Thus, the private vehicle sharing service disclosed is not intended to include the typical airline, bus, passenger train, etc. modes of transportation. It should be appreciated, however, that the private vehicle sharing service disclosed can be utilized with a privately arranged "charter" transportation service.

**[0011]** Referring now to FIG. 1, a diagram of an example computing network 100 for implementing a private vehicle sharing service according to some implementations of the present disclosure. The computing network 100 can include a server computing device 110 that communicates with one or more other computing devices via a network 120. The network 120 can include a local area network (LAN), a wide area network (WAN), e.g., the Internet, or a combination thereof. The server computing device 110

can be controlled or otherwise operated by the private vehicle sharing services provider 112 to implement the private vehicle sharing service, as described below.

[0012] The server computing device 110 can include a communication device, a processor, and a memory device. It should be appreciated that the term server computing device 110 as used herein is intended to refer to both a single server computing device and a plurality of server computing devices operating in conjunction to perform functions (e.g., in a parallel or distributed architecture). The communication device can include any suitable components (e.g., a transceiver) configured for communication with the one or more other computing devices. The memory can be any suitable storage medium (flash, hard disk, etc.) configured to store information at the server computing device 110. The processor can control operation of the server computing device 110. Example functions performed by the processor include, but are not limited to, loading/executing an operating system of the server computing device 110, controlling communication with other components on the network 120 (e.g., the other computing devices) via the communication device, and controlling read/write operations at the memory. The term "processor" as used herein can refer to both a single processor and a plurality of processors operating in a parallel or distributed architecture. The processor can also be configured to perform at least a portion of the techniques of the present disclosure, which are now discussed in greater detail.

**[0013]** In the illustrated example, the server computing device 110 is in communication with a user computing device 130 that is associated with a user 132 and an operator computing device 140 that is associated with an operator 142. Examples of the user computing device 130 and the operator computing device 140 include, but are

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not limited to, a desktop computer, a laptop computer, a tablet computer, and a mobile phone.

**[0014]** The user 132 is an entity (an individual, a group of individuals, a family, a corporation, etc.) that has contracted with the private vehicle sharing services provider 112 to receive private transportation services from the operator 142. The operator 142 is an entity (an individual, a group of individuals, a family, a corporation, etc.) that has contracted with the private vehicle sharing services provider 112 to provide private transportation services to user(s) 132 via one or more operator vehicles 144. In an example embodiment, the operator 142 is an independent and separate entity from the private vehicle sharing services provider 112, although it should be appreciated that the private vehicle sharing services provider 112 and the operator 142 could have an employee/employer or other form of agency relationship.

**[0015]** The user 132 can interact with his/her user computing device 130 to arrange a trip from a first (origination) location to a second (destination) location. For example only, the user 132 can utilize an application executing at her/his user computing device 130 to communicate with the server computing device 110 and private vehicle sharing services provider 112.

**[0016]** According to some aspects of the present disclosure, the user 132 and the private vehicle sharing services provider 112 can enter into a subscription/membership agreement for utilizing/providing a private vehicle sharing service. For example only, the subscription/membership agreement can provide that, for a certain fee paid by the user 132 to the private vehicle sharing services provider 112, the user 132 can utilize the private vehicle sharing service for a particular amount of use over a given period. In

this manner, the user 132 can receive private transportation, e.g., from one of a plurality of operators 142 and associated operator vehicles 144, on an "as-needed" basis for the certain fee. In this manner, the user 132 can contract with and rely upon the private vehicle sharing services provider 112 to provide payment to the operator(s) 142 of the vehicle(s) 144, without any direct relationship/arrangement with operator(s) 142.

**[0017]** As briefly mentioned above, the user 132 could represent not just a single individual, but also a group of individuals (a family, coworkers, friends, roommates, etc.) that have entered into a subscription/membership agreement for utilizing/providing the private vehicle sharing service with the private vehicle sharing services provider 112. In this manner, for example, each member of a group of individuals can utilize the private vehicle sharing service individually or together, thereby acting as the user 132. This type of group or shared plan can be very useful for a family or other group of individuals that frequently, but not exclusively, travels together.

**[0018]** The subscription/membership agreement can provide any number of options related to the particular amount of use over the particular period. For example only, the subscription/membership agreement can be one of a plurality of preset membership options, such as a first level of "X" distance for a cost of "Y," a second level of "A" distance for a cost of "B," and so on. The unit measurement of the amount of use can be distance-based, trip-based, time-based, a combination thereof, or any other form of measurement. For example only, a user 132 can purchase a subscription/membership that provides for a distance of "C" or "D" individual trips, whichever comes first. It should be appreciated that other forms of measuring and purchasing an amount of use

could be implemented, such as a duration of travel (a particular amount of minutes of travel per particular time period) alone or in combination with the above.

**[0019]** In some aspects, the particular period of use may be of a limited duration, such as, a day, a week, a month, and so on. Alternatively, the particular period of use may be of an unlimited duration, that is, the amount of use is available until used. The subscription/membership can also provide for a recurring subscription in which the user 132 pays a recurring fee (weekly, monthly, etc.) for an amount of use for the same or a different time period. Alternatively or additionally, a user 132 could purchase a one-time subscription of a certain amount of use for a certain fee. In yet another example, a user 132 could pay a set subscription/membership fee for accessing (that is, the ability to use) the private vehicle sharing service at a discounted rate. It should be appreciated that other subscription/membership options are within the scope of this disclosure.

[0020] particular 132 In one example, user enter into а can а subscription/membership agreement with the private vehicle sharing services provider 112 to provide the user 132 with private transportation on a recurring schedule. For example only, a user 132 may purchase a membership/subscription that provides for private transportation from a first location (the home of the user 132) to a second location (the workplace of the user 132) every workday at 8:00 A.M.

**[0021]** In yet another example, a community marketplace may be organized that allows for individuals to purchase a membership/subscription for other users 132 to allow for "gifting" of transportation. In addition or alternatively, the community marketplace may allow users 132 to buy, sell, or otherwise transfer all or a portion of a user's 132 purchased amount of use to other users 132.

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**[0022]** Referring now to FIG. 2, a schematic diagram of an example user interface 200 for a private vehicle sharing service according to some implementations of the present disclosure. In the illustrated example, the user interface 200 is shown as being displayed on a display device associated with the user computing device 130 described above, although other forms of display are contemplated. The user interface 200 includes a banner portion 210, a trip details portion 220, a distance details portion 230, a duration details portion 240, and a modification interface portion 250.

The banner portion 210 can provide an indication of what the user interface [0023] 200 is displaying. In the illustrated example, the banner portion 210 is displaying "USE LOG" to indicate that the user interface 200 is displaying the current use of the private vehicle sharing service by the user 132. The trip details portion 220 is shown as displaying the amount of trips purchased by the user 132, including displaying the total amount of trips, the amount of trips used to date in the use period, and the remaining amount of trips available to the user 132 in the use period. Similarly, the distance details portion 230 is shown as displaying the amount of distance purchased by the user 132, including displaying the total amount of distance, the amount of distance used to date in the use period, and the remaining amount of distance available to the user 132 in the use period. Finally, the duration details portion 240 is shown as displaying the amount of time in the use period purchased by the user 132, including displaying the total amount of time, the amount of time expired to date in the use period, and the remaining amount of time in the use period. As shown in FIG. 2, the amount of use (trips, distance, and time) can be displayed in absolute values and/or as a percentage of total allowable use.

**[0024]** The modification interface portion 250 can provide an interface with which the user 132 may interact to modify the details of the purchased subscription/membership. It should be appreciated that the user interface 200 is merely one example and a greater or lesser number of portions can be displayed.

**[0025]** According to some aspects of the present disclosure, the user interface 200 can be continually or periodically updated to provide an up-to-date record of use to the user 132. In this manner, a user 132 can be made immediately aware of the details of his/her use of the private vehicle sharing service membership/subscription upon viewing the user interface 200. This allows, among other things, the ability of the user 132 to modify her/his use of the private vehicle sharing service sharing service, and/or her/his membership/subscription with the private vehicle sharing service, to optimize the benefits provided by the proposed techniques.

**[0026]** In order to maintain a record of the use by the user 132, the private vehicle sharing services provider 112 can maintain a record 300 that can be stored, e.g., in a database saved on a memory device (not shown) included in or associated with the server computing device 110. A table representing an example record 300 is shown in FIG. 3. In the illustrated example, the record 300 includes a user identification portion 310, a trip details portion 320, a distance details portion 330, and a time period/duration details portion 340. In the illustrated example, the information in the record 300 corresponds to the information displayed in the user interface 200 shown in FIG. 2. It should be appreciated that a record 300 can include more or less information in any particular implementation.

**[0027]** Example embodiments are provided so that this disclosure will be thorough, and will fully convey the scope to those who are skilled in the art. Numerous specific details are set forth such as examples of specific components, devices, and methods, to provide a thorough understanding of embodiments of the present disclosure. It will be apparent to those skilled in the art that specific details need not be employed, that example embodiments may be embodied in many different forms and that neither should be construed to limit the scope of the disclosure. In some example embodiments, well-known procedures, well-known device structures, and well-known technologies are not described in detail.

**[0028]** The terminology used herein is for the purpose of describing particular example embodiments only and is not intended to be limiting. As used herein, the singular forms "a," "an," and "the" may be intended to include the plural forms as well, unless the context clearly indicates otherwise. The term "and/or" includes any and all combinations of one or more of the associated listed items. The terms "comprises," "comprising," "including," and "having," are inclusive and therefore specify the presence of stated features, integers, steps, operations, elements, and/or components, but do not preclude the presence or addition of one or more other features, integers, steps, operations, elements, components, and/or groups thereof. The method steps, processes, and operations described herein are not to be construed as necessarily requiring their performance in the particular order discussed or illustrated, unless specifically identified as an order of performance. It is also to be understood that additional or alternative steps may be employed.

**[0029]** Although the terms first, second, third, etc. may be used herein to describe various elements, components, regions, layers and/or sections and/or sections, these elements, components, regions, layers and/or sections should not be limited by these terms. These terms may be only used to distinguish one element, component, region, layer or section from another region, layer or section. Terms such as "first," "second," and other numerical terms when used herein do not imply a sequence or order unless clearly indicated by the context. Thus, a first element, component, region, layer or section discussed below could be termed a second element, component, region, layer or section without departing from the teachings of the example embodiments.

**[0030]** The techniques described herein may be implemented by one or more computer programs executed by one or more processors. The computer programs include processor-executable instructions that are stored on a non-transitory tangible computer readable medium. The computer programs may also include stored data. Non-limiting examples of the non-transitory tangible computer readable medium are nonvolatile memory, magnetic storage, and optical storage.

**[0031]** Some portions of the above description present the techniques described herein in terms of algorithms and symbolic representations of operations on information. These algorithmic descriptions and representations are the means used by those skilled in the data processing arts to most effectively convey the substance of their work to others skilled in the art. These operations, while described functionally or logically, are understood to be implemented by computer programs. Furthermore, it has also proven convenient at times to refer to these arrangements of operations as modules or by functional names, without loss of generality.

**[0032]** Unless specifically stated otherwise as apparent from the above discussion, it is appreciated that throughout the description, discussions utilizing terms such as "processing" or "computing" or "calculating" or "determining" or "displaying" or the like, refer to the action and processes of a computer system, or similar electronic computing device, that manipulates and transforms data represented as physical (electronic) quantities within the computer system memories or registers or other such information storage, transmission or display devices.

**[0033]** Certain aspects of the described techniques include process steps and instructions described herein in the form of an algorithm. It should be noted that the described process steps and instructions could be embodied in software, firmware or hardware, and when embodied in software, could be downloaded to reside on and be operated from different platforms used by real time network operating systems.

**[0034]** The present disclosure also relates to an apparatus for performing the operations herein. This apparatus may be specially constructed for the required purposes, or it may comprise a general-purpose computer selectively activated or reconfigured by a computer program stored on a computer readable medium that can be accessed by the computer. Such a computer program may be stored in a tangible computer readable storage medium, such as, but is not limited to, any type of disk including floppy disks, optical disks, CD-ROMs, magnetic-optical disks, read-only memories (ROMs), random access memories (RAMs), EPROMs, EEPROMs, magnetic or optical cards, application specific integrated circuits (ASICs), or any type of media suitable for storing electronic instructions, and each coupled to a computer system bus. Furthermore, the computers referred to in the specification may include a single

processor or may be architectures employing multiple processor designs for increased computing capability.

**[0035]** The algorithms and operations presented herein are not inherently related to any particular computer or other apparatus. Various general-purpose systems may also be used with programs in accordance with the teachings herein, or it may prove convenient to construct more specialized apparatuses to perform the required method steps. The required structure for a variety of these systems will be apparent to those of skill in the art, along with equivalent variations. In addition, the present disclosure is not described with reference to any particular programming language. It is appreciated that a variety of programming languages may be used to implement the teachings of the present disclosure as described herein, and any references to specific languages are provided for disclosure of enablement and best mode of the present invention.

**[0036]** The present disclosure is well suited to a wide variety of computer network systems over numerous topologies. Within this field, the configuration and management of large networks comprise storage devices and computers that are communicatively coupled to dissimilar computers and storage devices over a network, such as the Internet.

**[0037]** The foregoing description of the embodiments has been provided for purposes of illustration and description. It is not intended to be exhaustive or to limit the disclosure. Individual elements or features of a particular embodiment are generally not limited to that particular embodiment, but, where applicable, are interchangeable and can be used in a selected embodiment, even if not specifically shown or described. The same may also be varied in many ways. Such variations are not to be regarded as a

departure from the disclosure, and all such modifications are intended to be included within the scope of the disclosure.

Singh: SYSTEM AND METHOD FOR A PRIVATE VEHICLE SHARING SERVICE Title: SYSTEM AND METHOD FOR PRIVATE VEHICLE SHARING SERVICE Inventor: Balwinder Singh Atty. Docket No.: 16013-500011

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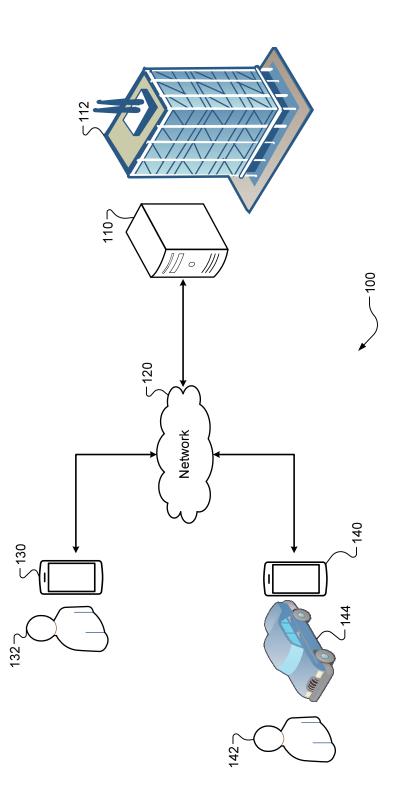


FIG. \

#### Defensive Publications Series, Art. 111 [2016] Title: SYSTEM AND METHOD FOR PRIVATE VEHICLE SHARING SERVICE Inventor: Balwinder Singh Atty. Docket No.: 16013-500011

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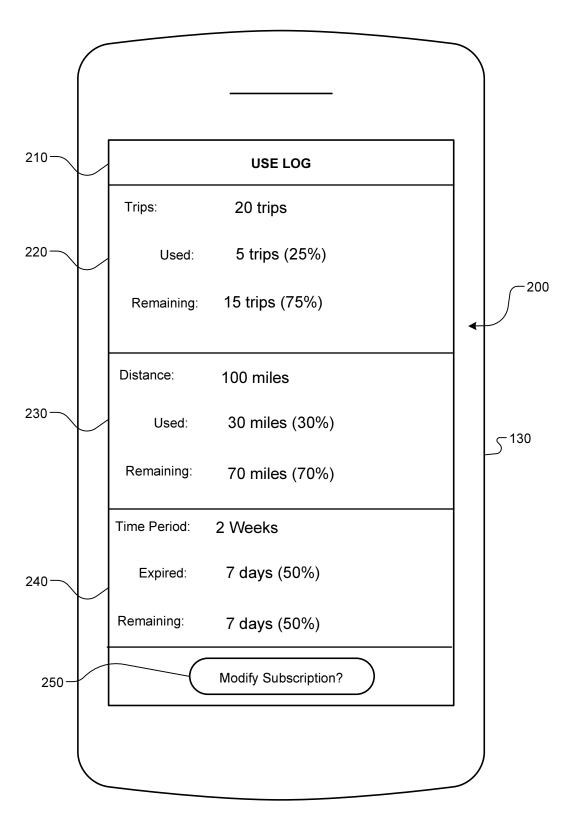
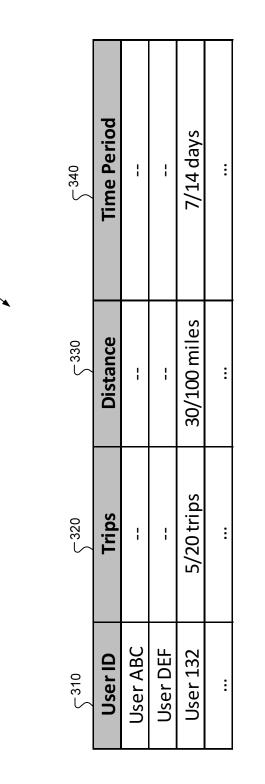


FIG. 2

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