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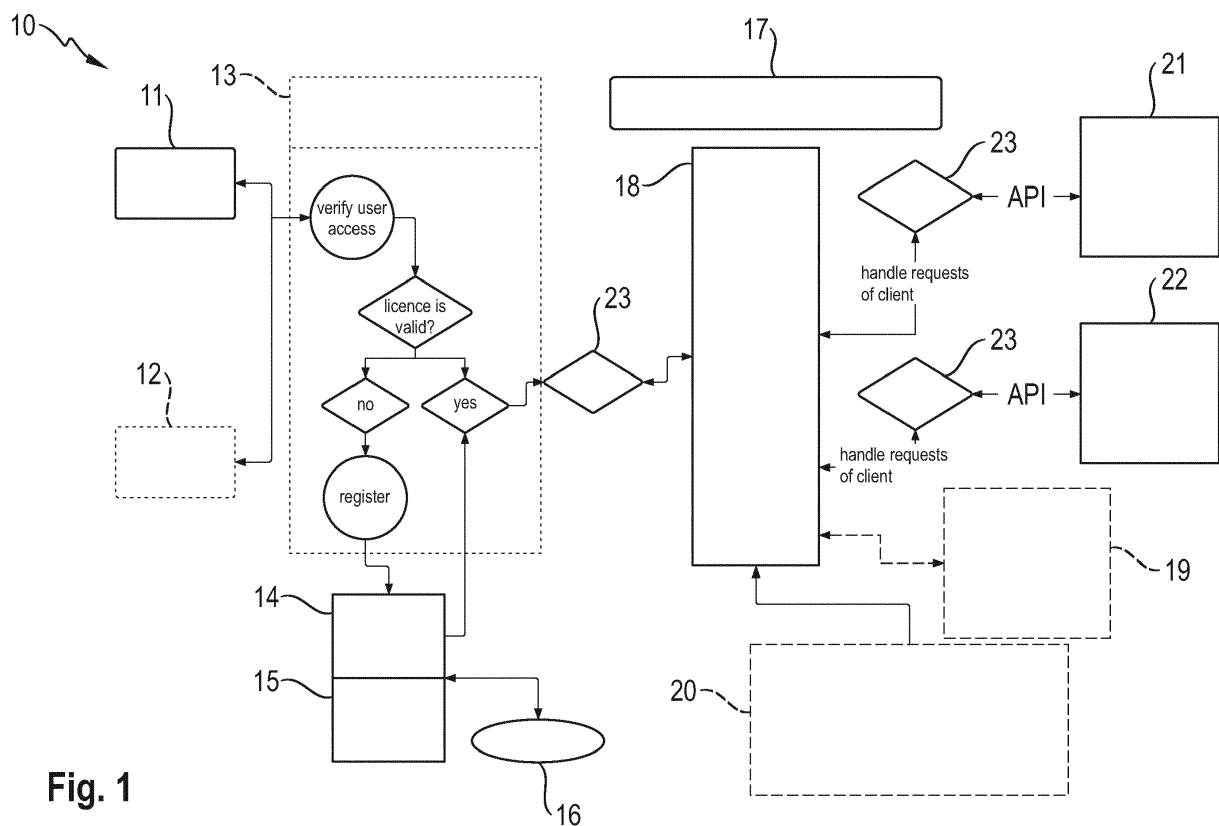
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(54) **SYSTEM FOR PROVIDING A TRAVEL EXPERIENCE TO A CAR OWNER**

(57) The invention provides a system for providing a travel experience to a car owner characterized in a back-end service layer (18) for serving content (20) to mobile

apps (11, 12) and data storage (20) connected to the service layer (18) for storing master and transactional data.



Description

[0001] The present invention pertains to a system for providing a travel experience to a car owner.

Background art

[0002] Within the field of user interface technique, a computer program designed to run on a mobile device such as a phone, tablet, or watch is commonly referred to as a mobile app. State-of-the-art apps that are not preinstalled are usually available through distribution platforms called app stores.

[0003] CN 105185149 discloses a parking lot parking space reservation and navigation system which comprises multiple parking lot front-end servers arranged in each parking lot, a public network server for user access, and a client APP. Each of the parking lot front-end servers stores the available parking space information of the parking lot to which the parking lot front-end server belongs, the position of the parking lot and charge information and transmits internally updated data information to the public network server in real time. The public network server receives the data information transmitted by the multiple parking lot front-end servers and summarizes the information, receives the parking request information sent by the client APP, responds to the parking space reservation request sent by the client APP and processes the order submitted by each user. According to the system, through a VIP parking lot parking space reservation and navigation system based on a mobile phone or vehicle APP, a VIP vehicle owner can be helped to easily book a parking space, a navigation function can be provided to guide the vehicle owner to reach a reserved parking space, and convenience is provided for user travel and parking management.

[0004] As per US 2016098929, a driver uses a mobile phone application to transmit a request to a central processor for information on available parking spaces, accommodating a specific size car, close to her present location or a future location. An image processor processes real time images from linked cameras overlooking parking spaces, comparing them with reference images of unoccupied parking spaces, vehicles including automobiles, bicycles and motorcycles, a no parking sign sandwich board and a traffic cone. The image processor sends the information on available parking spaces to the central processor. The central processor saves image processor information and information on available parking spaces, parking fee and advertising promotions from parking facilities on a database and transmits a response to the driver's request. The mobile phone application displays and audio broadcasts the response. The driver pays a fee and reserves an available parking space to exclude it from responses to other requests.

[0005] US 2016119897 discloses a mobile terminal capable of allowing a driver to drive a vehicle safely, by providing notification information related to the vehicle,

and notification information received from the mobile terminal according to priorities, and a method of controlling the same. The mobile terminal includes: a communication unit; an output unit configured to output road guidance information; and a controller configured to detect first notification information related to a vehicle, to receive second notification information from a mobile terminal through the communication unit, to set priorities of the first and second notification information, and to output the first and second notification information to the output unit according to the set priorities.

[0006] A projected architecture system as per US 2016207400 may include a first device, associated with a driver of a vehicle, which drives the display of content on the infotainment screen of the vehicle. A passenger in the motor vehicle may have a second device that the passenger can utilize to transmit an instruction to the first device. The instruction may cause the display of the infotainment system to be altered. The passenger may, for example, utilize the second device to cast a point of interest or navigation direction to the infotainment display via the first device. Thus, the driver does not need to search, browse, and/or view functions and/or content on the infotainment system's display and can concentrate on operating the vehicle.

Disclosure of the invention

[0007] The invention provides a system for providing a travel experience to a car owner.

[0008] Embodiments of the invention are set out in the dependent claims.

Brief description of drawings

[0009] The sole figure gives an architectural overview of a system as per the invention.

Embodiment of the invention

[0010] The figure illustrates a preferred embodiment of the invention accessible through exemplary iOS and Android apps (11, 12). Upon authentication (13) or, if necessary, registration of the car owner through a portal or web shop (14) providing adequate license management (15) and payment services (16), the respective app (11, 12) connects to a backend service layer (18) through a preferably RESTful application programming interface (API 23) to retrieve content (20), for example, app tiles and additional text or images. The service layer (18) itself is hosted on an on-demand cloud computing platform (17) such as Amazon Web Services (AWS) and equipped with data storage (19) for master and transactional data, while third-party providers (21) and customer-relationship management (CRM 22) may be integrated through additional APIs (23).

[0011] As a central element of the apps (11, 12), a personal companion ("Lifestyle Assistant") offers various ex-

traordinary experiences, products, and services world-wide and around the clock and is preferably accessible by phone, email, and feature-rich chat. The apps (11, 12) may further provide access to vehicle-related services such as car wash, parking, partner benefits, VIP airport or other services, airport parking, valet parking, or lounge info and access. Lastly, the apps (11, 12) may provide access to bucket-list events, social and business clubs, selected tickets, premium shopping, and other curated travel experiences.

Claims

1. System (10) for providing a travel experience to a car owner, **characterized in**

- a backend service layer (18) for serving content (20) to mobile apps (11, 12) and
- data storage (20) connected to the service layer (18) for storing master and transactional data.

2. System (10) as per claim 1, **characterized in that** the apps (11, 12) comprise at least one of the following:

- an iOS app (11) or
- an Android (12) app.

3. System (10) as per claim 1 or 2, **characterized in**

- means for authentication (13) of the car owner via the apps (11, 12).

4. System (10) as per any of claims 1 through 3, **characterized in**

- a portal or web shop (14) providing license management (15) and
- payment services (16) provided through the portal or web shop (14).

5. System (10) as per any of claims 1 through 4, **characterized in that**

- at least the backend service layer (18) is hosted in a cloud (17).

6. System (10) as per any of claims 1 through 5, **characterized in**

- a first application programming interface (23) for integrating third-party providers (21) with the service layer (18).

7. System (10) as per any of claims 1 through 6, **characterized in**

- a second application programming interface (23) for providing customer relationship management (22) through the service layer (18).

8. System (10) as per any of claims 1 through 7, **characterized in**

- a third application programming interface (23) for serving the apps (11, 12) upon authentication (13).

9. System (10) as per any of claims 1 through 8, **characterized in that**

- the application programming interfaces (23) are RESTful.

10. System (10) as per any of claims 1 through 8, **characterized in that** the travel experience encompasses at least one of the following:

- a lifestyle assistant,
- airport service,
- valet parking, or
- points of interest.

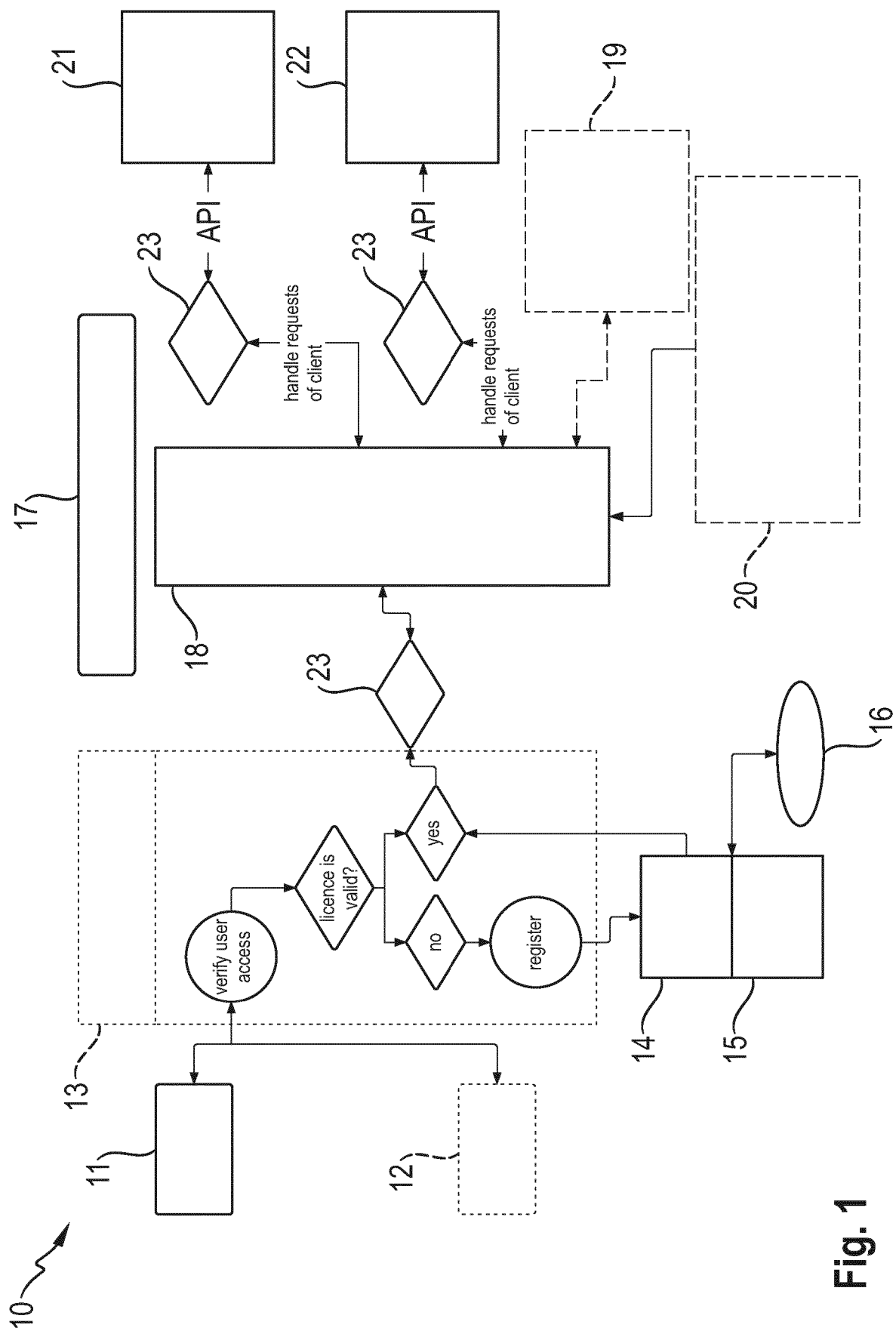


Fig. 1



EUROPEAN SEARCH REPORT

Application Number
EP 19 02 0338

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2016/092176 A1 (STRAUB CHRISTIAN DAVID [US] ET AL) 31 March 2016 (2016-03-31) * the whole document * -----	1-10	INV. G06Q50/00
			TECHNICAL FIELDS SEARCHED (IPC)
			G06Q
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 20 September 2019	Examiner Sigolo, Alessandro
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03/82 (P04C01)

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EPO FORM P0459

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REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- CN 105185149 [0003]
- US 2016098929 A [0004]
- US 2016119897 A [0005]
- US 2016207400 A [0006]