FORM 2

THE PATENTS ACT, 1970

(39 of 1970)

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THE PATENTS RULES, 2003

COMPLETE SPECIFICATION

1. TITLE OF THE INVENTION

SYSTEM AND METHOD FOR RESOLVING THE PARKING ISSUES USING SMART VEHICLE PARKING

2. APPLICANT(S)

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3. PREAMBLE TO DESCRIPTION

COMPLETE SPECIFICATION-

The following specification particularly describes the invention and the manner in which it is to be performed.

SYSTEM AND METHOD FOR MEDICINAL PLANT LEAVES DETECTION

Field of the Invention

[0001] The present invention is related to the Computer Science field.

Background

[0002] The idea solves the issue of vehicle parking and traffic during the rush hour by providing them a safe parking spot.

[0003] The background description includes information that may be useful in understanding the present invention. It is not an admission that any of the information provided herein is prior art or relevant to the presently claimed invention, or that any publication specifically or implicitly referenced is prior art.

[0004] The present invention is directed to imbalance between parking supply and demand, this is the main reason for metropolis parking problem.

[0005] As mentioned in patent, RU2698603C2, the work is related to a vehicle parking assistance system and a parking method. Proposed system comprises parking sensor and controller. Controller is programmed to direct vehicle to parking place based on angular yaw rate, vehicle speed on GPS, wheel rotation speed and initial tire

radius, so that variations of tire radius from initial tire radius during previous driving cycle do not cause larger distance between vehicle parking space and curb stone than preset threshold distance.

[0006] In China patent, CN103635947B, there is provided a kind of auxiliary control, in the sense of discomfort implementing can suppress further when assisting for the driving of the barrier of proceeds posterolateral to bring to driver. Braking force/driving force control module detects the road shape of this vehicle front and judges that intention is changed in the track of driver according to the steering volume of detected road shape and driver.

[0007] In China patent, CN109017763B, methods and systems for controlling parking of an autonomous vehicle are provided. A method of parking an autonomous vehicle included the receiving sensor data indicative of an external environment of the autonomous vehicle. The received sensor data is processed to determine a parking space characterization. The work was published in 2017.

[0008] All publications herein are incorporated by reference to the same extent as if each individual publication or patent application were specifically and individually indicated to be incorporated by reference. Where a definition or use of a term in an incorporated reference isinconsistent or contrary to the definition of that term provided herein, the

definition of that term provided herein applies and the definition of that term in the reference does not apply.

[0009] In some embodiments, the numbers expressing quantities of ingredients, properties such as concentration, reaction conditions, and so forth, used to describe and claim certain embodiments of the invention areto be understood as being modified in some instances by the term "about." Accordingly, in some embodiments, the numerical parameters set forth in the written description and attached claims are approximations that can vary depending upon the desired properties sought to be obtained by a particular embodiment. In some embodiments, the numerical parameters should be construed considering the number of reported significant digits andby applying ordinary rounding techniques. Not with standing that the numerical ranges and parameters setting forth the broad scope of some embodiments of the invention are approximations, the numerical values set forth in the specific examples are reported as precisely as practicable. Thenumerical values presented in some embodiments of the invention may contain certain errors necessarily resulting from the standard deviation found in their respective testing measurements.

[0010] As used in the description herein and throughout the claims that follow, the meaning of "a," "an," and "the" includes

plural reference unless the context clearly dictates otherwise. Also, as used in the description herein, the meaning of "in" includes "in" and "on" unless the context clearly dictates otherwise.

[0011] The recitation of ranges of values herein is merely intended to serve as a shorthand method of referring individually to each separate value falling within the range. Unless otherwise indicated herein, each individual value is incorporated into the specification as if it were individually recited herein. All methods described herein can be performed any suitable order unless otherwise indicated herein or otherwise clearly contradicted by context. The use of any and all examples, or exemplary language (e.g. "such as") provided with respect to certain embodiments herein is intended merely to better illuminate the invention and does not pose a limitation on the scope of the invention otherwise claimed. No language in the specification should be construed as indicating any non-claimed element essential to the practice of the invention.

[0012] Groupings of alternative elements or embodiments of the invention disclosed herein are not to be construed as limitations. Each group member can be referred to and claimed individually or in any combination with other members of the group or other elements found herein. One or more members of a group can be included in, or deleted from, a group for reasons of convenience and/or patentability. When any such inclusion or deletion occurs,

the specification is herein deemed to contain the group as modified thus fulfilling the written description of all Markush groups used in the appended claims.

Objects of the Invention

[0011] The present invention focuses on parking issues and the parking assistance.

[0012] Apart from above the objectives are:

- The primary objective is to bring vacant area, which can be utilized for parking under one label/roof/umbrella so that they could be easily accessible for same.
- This area could be any empty plot, garage, or vacant area in house for parking or any other space owned by an individual entity.
- It aims to provide safe parking areas and to reduce the roadblocks.
- It would be acting as a broker between car-owner and area owner

Summary

[0013] The imbalance between the number of cars and parking areas creates a lot of chaos. The saturation of parking space during rush hour results in roadblocks and a lot of inconvenience. So, inventor would be bringing the vacant area owned by any individual entity under one roof which can be utilized for parking under one label/roof/umbrella so that they could be easily accessible for same. By doing so, not only the problem of saturated parking space would be solved but also it would be approach for Smart City and Sustainable Development and the landowner may generate a little revenue out of the same.

[0014] Inventor would be installing the IOT modules in the vacant area which would automatically detect and sense if the plot is free or not and would update it on the web-app. The area-owner is also given flexibility and may cancel if he/she does not want the area to be booked. The safety concerns of both parties would be well taken care of by a rating and review system and by verification before entering the premises for parking the vehicle.

Drawings:

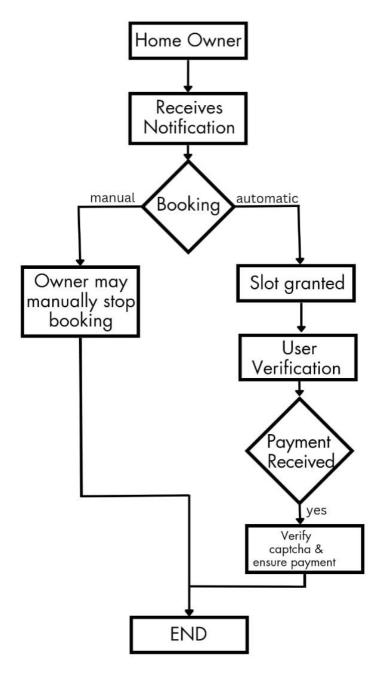


Fig.1 Workflow of the Home Owner Side Module

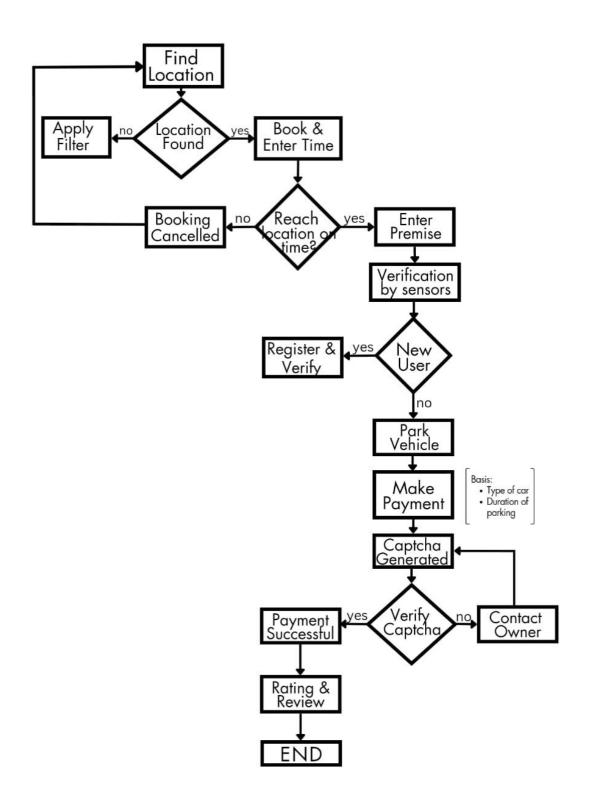


Fig. 2 User Workflow of the System

Description

[0015] The end users for the present invention:

- Anyone who owns a vehicle.
- People having vacant area.
- Tourists who travel with their vehicles.

[0016] Apparatus/Technology Used:

- ESP8266 and other sensors like IR, Ultrasonic
- Backend framework like Django
- Frontend framework-ReactJS
- Unity
- Database: Firebase (others yet to mention)

[0017] The term "non-transitory storage device" or "storage" or "memory," as used herein relates to a random-access memory, read only memory and variants thereof, in which a computer can store data or software for any duration.

[0018] The following discussion provides many example embodiments of the inventive subject matter. Although each embodiment represents a single combination of inventive elements, the inventivesubject matter is considered to include all possible combinations of the disclosed elements. Thus, if one embodiment comprises elements A, B, and C, and a second embodiment comprises elements B and D, then the inventive subject matter is also considered to include other remaining

combinations of A, B, C, or D, even if not explicitly disclosed.

Advantages of the Invention

[0019] The advantages of the present invention are:

- Sustainability: Utilizing the vacant space is a great option as compared to creating new parking space.
- Convenience: Instead of parking the vehicle anywhere on the road with the risk of getting challan and causing inconvenience to pedestrians, the vehicle-owner can get a slot for parking from any location.
- Revenue and Flexibility: People can generate some extra revenue just by lending their free space for parking when they want to. They can manually cancel the booking if they do not want to lend their space(ex:-when they are not in home)
- Standard Measure: Finding your vehicle in bulk parking is really crumble some process and there is no standard measurement of area where we park our car.

<u>Claims</u>

We Claim:

Claim 1. The system has an efficient system of parking and notify the vacant slots in parking.

Claim 2. With claim 1, on-demand parking booking service operated through a webapp.

Claim 3. With claim 1, the vehicle-owner can track the vacant space nearby in a particular location within the range.

Claim 4. In the system with claim 1, the system has the integrated payment system and has the interface of rating, feedback, and review system.

Claim 5. In the system with claim 1, has the verification of car owner before entering the premises. The landlord may discard the request of parking under certain circumstances or emergencies.

Claim 6. The system helps to recognize the different vehicles and find the appropriate space for parking in accordance with vehicle.

Abstract

The prevent invention is related to parking system and space management. The number of vehicles has expanded, while the parking space has remained constant. This has resulted in parking issues. The idea is to bring a vacant area which can be utilized for parking under one umbrella. In the invention, this way parking space would never be saturated, which regulated tariffs based on size of vehicle and duration would be taken care of. The system would ensure the safety of both vehicles and area-owner would be provided. The problem of cruising would be solved using this invention. Figures of the invention show the details of the work.

31 July 2023

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