



**GUJARAT TECHNOLOGICAL UNIVERSITY
(GTU)
INNOVATION COUNCIL (GIC)
Patent Search & Analysis Report
(PSAR)**



Date of Submission : 10/10/2019

Dear Shah Dhruvi Manish,

Studied Patent Number for generation of PSAR : 19BE7_160420107050_2

PART 1: PATENT SEARCH DATABASE USED

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|-----------------------------------|---|---|
| 1. Patent Search Database used | : | Google Patents |
| Web link of database | : | https://patents.google.com/ |
| 2. Keywords Used for Search | : | patent paper,iot,door mechanism |
| 3. Search String Used | : | iot for door mechanism |
| 4. Number of Results/Hits getting | : | 5870 |

PART 2: BASIC DATA OF PATENTED INVENTION /BIBLIOGRAPHIC DATA

- | | | |
|---|---|---|
| 5. Category/ Field of Invention | : | |
| 6. Invention is Related to/Class of Invention | : | Internet Of Things |
| 6 (a) : IPC class of the studied patent | : | E05B 55/12 |
| 7. Title of Invention | : | Intelligent door lock mechanism |
| 8. Patent No. | : | |
| 9. Application Number | : | 14/205,608 |
| 9 (a) : Web link of the studied patent | : | https://patents.google.com/patent/US20140265359?q=iot+for+lock+mechanism |
| 10. Date of Filing/Application (DD/MM/YYYY) | : | 03/12/2014 |
| 11. Priority Date (DD/MM/YYYY) | : | |
| 12. Publication/Journal Number | : | |
| 13. Publication Date (DD/MM/YYYY) | : | 09/18/2014 |
| 14. First Filled Country : Albania | : | |

15. Also Published as

Sr.No	Country Where Filled	Application No./Patent No.
1		

16. Inventor/s Details.

Sr.No	Name of Inventor	Address/City/Country of Inventor
1	Shih Yu Thomas Cheng	Union City
2	Jason Johnson	San Francisco
3	Christopher Kim	CA (US)

17. Applicant/Assignee Details.

Sr.No	Name of Applicant/Assignee	Address/City/Country of Applicant
1	August Home Inc	San Francisco

18. Applicant for Patent is : Company

PART 3: TECHNICAL PART OF PATENTED INVENTION**19. Limitation of Prior Technology / Art**

The system crashes when it loses internet connection

20. Specific Problem Solved / Objective of Invention

An intelligent door lock system is provided with a position sensing device configured to be coupled to a drive shaft of a lock device. The position sensing device senses position of the drive shaft and assists in locking and unlocking a lock of a lock device. An engine is provided with a memory coupled to the positioning sensing device.

21. Brief about Invention

This invention relates generally to door lock devices, and more particularly to intelligent door lock devices

22. Key learning Points

Door mechanism by Internet Of Things.

23. Summary of Invention

An object of the present invention is to provide an intelligent door lock system in communication with an intelligent door lock system back-end. Another object of the present invention is to provide an intelligent door lock system that can detect and/or measure, door knock, bolt position, door close? open action manual key sensing, and the like. Still another object of the present invention is to provide an intelligent door lock system that utilizes a variety of position sensing devices including but not limited to, accelerometers, optical encoders, magnetic encoders, mechanical encoders, Hall Effect sensors, potentiometers, contacts with ticks and the like, that is positioned on a drive shaft, or on an element coupled to the drive shaft.

24. Number of Claims : 42

25. Patent Status : Published Application

26. How much this invention is related with your IDP/UDP?

71 to 90%

27. Do you have any idea to do anything around the said invention to improve it? (Give short note in not more than 500 words)

No suggestions