



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



**Date of Submission : 15/10/2020**

Dear Aghera Kishan Amrutlal,

Studied Patent Number for generation of PSAR : 20BE7\_170170107003\_2

## **PART 1: PATENT SEARCH DATABASE USED**

- |                                   |   |   |
|-----------------------------------|---|---|
| 1. Patent Search Database used    | : | Indian Patent Office database   |
| Web link of database              | : | <a href="http://ipindiaservices.gov.in/publicsearch/">http://ipindiaservices.gov.in/publicsearch/</a> |
| 2. Keywords Used for Search       | : | nlp, deep learning, sentiment analysis  |
| 3. Search String Used             | : | nlp deep learning   |
| 4. Number of Results/Hits getting | : | 1377  |

## **PART 2: BASIC DATA OF PATENTED INVENTION /BIBLIOGRAPHIC DATA**

- |   |   |   |
|---|---|---|
| 5. Category/ Field of Invention               | : |   |
| 6. Invention is Related to/Class of Invention | : | Computer Science  |
| 6 (a) : IPC class of the studied patent       | : | G06Q50/00   |
| 7. Title of Invention                         | : | SENTIMENT ANALYSIS: NLP-BASED SENTIMENT ANALYSIS USING DEEP LEARNING PROGRAMMING.   |
| 8. Patent No.                                 | : | 33/2020   |
| 9. Application Number                         | : | 202041031443  |
| 9 (a) : Web link of the studied patent        | : | <a href="http://ipindiaservices.gov.in/PublicSearch/PublicationSearch/PatentDetails">http://ipindiaservices.gov.in/PublicSearch/PublicationSearch/PatentDetails</a> |
| 10. Date of Filing/Application (DD/MM/YYYY)   | : | 07/22/2020  |
| 11. Priority Date (DD/MM/YYYY)                | : |   |
| 12. Publication/Journal Number                | : |   |
| 13. Publication Date (DD/MM/YYYY)             | : |   |
| 14. First Filled Country : Albania            | : | 100   |

**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	Dr A MOHAN BABU	INDIA

**17. Applicant/Assignee Details.**

Sr.No	Name of Applicant/Assignee	Address/City/Country of Applicant
1	AUDISANKARA COLLEGE OF ENGINEERING TECHNOLOGY	INDIA

**18. Applicant for Patent is** : College

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

No limitation found as of now.

**20. Specific Problem Solved / Objective of Invention**

The invention, such tools are provided in the form of a "ready-made" Sentiment Widget, which is programmed to analyze sentiment for a particular topic, entity, or facet (e.g., characteristic of an entity).

**21. Brief about Invention**

The invention "Sentiment Analysis" is related to techniques and systems for providing sentiment analysis using deep learning programming and natural language processing to determine sentiment.

**22. Key learning Points**

NLP, Deep learning

**23. Summary of Invention**

"Sentiment Analysis" is a technique for providing sentiment analysis and for presenting the results. The invention, such tools are provided in the form of a "ready-made" Sentiment Widget, which is programmed to analyze sentiment for a particular topic, entity, or facet (e.g., characteristic of an entity). Example: provide a Sentiment Analysis System ("SAS"), which provides tools to enable authors, programmers, users, developers, and the like to incorporate sentiment analysis into their content, such as into their web pages, and other web blogs or textual content. And also the SAS provides a Sentiment Analysis Engine, a SAS API, and one or more user interface tools for presenting sentiment analysis. Other embodiments provide other mechanisms and examples of user interfaces that incorporate the techniques of the SAS and deliver information via NLP-based sentiment analysis to a consumer of such results.

**24. Number of Claims** : 10

**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)**

As the invention uses NLP, there is no more room for any improvement. as of now.