



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



Date of Submission : 13/10/2019

Dear **Patel Prinshu Manojprasad**,

Studied Patent Number for generation of PSAR : **19BE7_160160109070_2**

PART 1: PATENT SEARCH DATABASE USED

1. Patent Search Database used : Google Patents

Web link of database : <https://patents.google.com/>

2. Keywords Used for Search : GSM, MONITORING, SUBSTATION

3. Search String Used : (((GSM) AND (MONITORING))) OR (FOR SUBSTATION))

4. Number of Results/Hits getting : 8889

PART 2: BASIC DATA OF PATENTED INVENTION /BIBLIOGRAPHIC DATA

5. Category/ Field of Invention :

6. Invention is Related to/Class of Invention : GSM BASED

6 (a) : IPC class of the studied patent : HO2J 13/00

7. Title of Invention : On-line monitoring system for transmission line fault

8. Patent No. : CN1547306A

9. Application Number : CNA2003101093293A

9 (a) : Web link of the studied patent : [https://patents.google.com/patent/CN1547306A/en?q=\(\(GSM\)+AND+\(MONITORING\)\),FOR+SUBSTATION](https://patents.google.com/patent/CN1547306A/en?q=((GSM)+AND+(MONITORING)),FOR+SUBSTATION)

10. Date of Filing/Application (DD/MM/YYYY) : 12/12/2003

11. Priority Date (DD/MM/YYYY) :

12. Publication/Journal Number :

13. Publication Date (DD/MM/YYYY) :

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	Huang Xiandong	CHINA

17. Applicant/Assignee Details.

Sr.No	Name of Applicant/Assignee	Address/City/Country of Applicant
1	Shanghai Dongyun IT Development Co Ltd	CHINA

18. Applicant for Patent is : Company

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

The invention is a kind online supervising system for electricity cable failure, which is mainly used in the failure detection of the cable in electric system. It includes a data collecting end and failure monitoring and maintaining system. The data collecting ends is set on the pole for setting the electric cables

20. Specific Problem Solved / Objective of Invention

The data collected by the collecting end is transmitted to the primary control station of the supervising supporting system with message type through the mobile communication network. The primary control station receives the message and completes the alarming, display and system diagnosis, maintenance, query and data transmitting, and printing and son on. The detecting speed is quick, the localization is accurate and reliable, the operation is convenient.

21. Brief about Invention

Monitoring system of the present invention, significant advantages are: data acquisition upward and downward by SMS message delivery with the mobile communication network between a master station and the terminal, information about upload from about 20 seconds to complete. Thus, upon transmission line failure, the master fault monitoring support system of the present invention is less than 30 seconds standing time can be promptly and accurately tell the transmission line fault and operation related art. Thus greatly reducing the burden on the workers of transmission line transmission line work, can save a lot of manpower, material resources, speed up locating transmission line fault point, but also quickly organize manpower to repair, restore power as quickly as possible, so that failure to reduce the losses to a minimum. Further, the size of the transmission line fault current record failure occurs, operation and maintenance personnel can assist damage by the impact of the current impact analysis apparatus, when for maintenance, which can improve safety and reliability of operation of transmission lines. Therefore, the transmission line fault-line monitoring system of the present invention has a very important role not only safe and reliable power supply for the power system, but also bring enormous social and economic benefits to the power system.

22. Key learning Points

This patent introduces us a key factors of GSM based technology that helps us to identify our project wide ideas that are going to implemented by us.

23. Summary of Invention

The present invention, in order to correctly detect and locate faults in power system transmission line for fast, accurate, and reliable, there is provided a power transmission line fault-line monitoring system.

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)

Not yet ready to do contribution.