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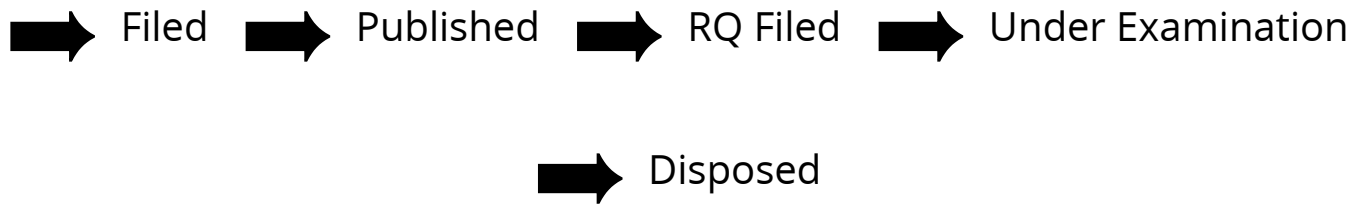INTELLECTUAL PROPERTY INDIA
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TITLE OF INVENTION	DESIGN & DEVELOPMENT OF AN INTELLIGENT SYSTEM TO ANALYZE THE IMPACT OF COVID-19 ON RESPIRATORY SYSTEM USING MACHINE LEARNING
FIELD OF INVENTION	BIO-MEDICAL ENGINEERING
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(51) International classification	:A61B0005000000, G06N0020000000, G16H0050700000, G16H0050200000, A61B0005010000	(71)**Name of Applicant :** **1)VNR VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY** Address of Applicant :Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O), Hyderabad, Telangana, 500 090, INDIA Telangana India
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(57) Abstract :

ABSTRACT DESIGN & DEVELOPMENT OF AN INTELLIGENT SYSTEM TO ANALYZE THE IMPACT OF COVID-19 ON RESPIRATORY SYSTEM USING MACHINE LEARNING • COVID-19 (Coronavirus Disease), a very dangerous infection disease that has changed the entire world scenario causing serious illness and even many deaths. The number of total cases affected and the number of total deaths throughout the world is exponential and throws a serious alarm to all human beings about this disease and finally causes a severe health emergency that also leads to lockdown in every country. This idea is aimed at design and development of an intelligent and integrated system that analyses the impact of COVID-19 on the respiratory system using machine learning techniques. It is also aimed at designing the medical kit which can closely monitor the COVID-19 patients health conditions, condition of health due to medication and psychological conditions. The observed health features are stored in the Knowledge Base (KB) for further analysis. As part of symptoms reported across the world, the first and primary affected body part is the respiratory system and then the COVID-19 shows its impact across all parts of the body and finally leads to death. The study also shows that initial diagnosis of the same if done then the better chances for its cure using 14 days of quarantine procedure and with proper medical care. This work uses the dataset of patients reported in china around 72,314 cases of COVID-19 found in china during December 31, 2019 to February, 11, 2020 and various quarantine centers in India using the medical kit arranged at the COVID-19 patients™ location and use various machine learning algorithms that finds the impact and analysis of COVID-19 on the respiratory system. Figure 1

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