

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141025430 A

(19) INDIA

(22) Date of filing of Application :08/06/2021

(43) Publication Date : 25/06/2021

(54) Title of the invention : PRESERVATION OF NUTRIENTS OF THE STORED MEAT BY IOT BASED MACHINE LEARNING ENABLED TECHNOLOGY

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Filing Date	:NA	

(57) Abstract :

A large amount of meat is wasted in terms of quality as well as quantity, due to improper storage. This meat loss is caused by the presence of microorganisms in the storage field. The improper storage of meat make the breakdown of fat, protein and carbohydrates ,which results in the development of off-odors, off-flavor and slim formation which make the meat objectionable for human consumption which are caused by the growth of microbes like salmonella, Escherichia coli,etc, releasing toxic gases like CO<sub>2</sub> and Methane from the meat. IoT and machine learning are used to periodically monitor the micro organisms growth and minimize the meat loss by preventing the gas formation in the meat. The presence of gas formation in the stored meat is detected by collecting and analyzing the environmental sensor data using the proposed system. The authorities will be enabled to take necessary action to prevent the meat from spoilage by the use of GSM modules. This paper focuses on the design and development of a system to prevent the meat loss.

No. of Pages : 14 No. of Claims : 3