

(54) Title of the invention : A BLOCKCHAIN-ENABLED SYSTEM FOR SMART HOSPITAL MANAGEMENT AND BLOOD CANCER PATIENT CARE UTILIZING NATURAL LANGUAGE PROCESSING AND IOT SENSORS

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<p>(57) Abstract :</p> <p>This utility patent describes an innovative blockchain-enabled system designed for enhancing hospital management and the care of blood cancer patients, utilizing advancements in Natural Language Processing (NLP) and Internet of Things (IoT) sensors. The system aims to integrate a secure and transparent blockchain framework with IoT devices to monitor patient health in real-time and NLP to process and analyze patient data efficiently. The core of the system comprises an array of IoT sensors that continuously collect health data from patients, such as blood pressure, heart rate, and other vital signs. This data is then securely logged onto a blockchain, ensuring that it remains tamper-proof and easily accessible by authorized healthcare providers. Simultaneously, NLP algorithms analyze patient interactions and clinical notes to extract relevant information, enabling personalized and timely medical interventions. The blockchain component not only enhances data security but also facilitates seamless sharing of patient information among healthcare providers, improving coordination and efficiency in patient care. Additionally, the system utilizes smart contracts to automate various administrative and clinical processes, such as patient admissions, discharge procedures, and medication management, thereby reducing human errors and operational costs. This integrated system promises to revolutionize hospital management by providing a cohesive platform for real-time patient monitoring, data security, and efficient healthcare delivery. It has the potential to significantly improve outcomes for blood cancer patients by enabling personalized treatment plans based on real-time data and advanced data analytics.</p>	