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(57) Abstract :
 This invention relates to Self-Healing IoT Network Protocols for Industrial Automation, presenting a comprehensive system and method for ensuring the continuous, resilient operation of interconnected devices within industrial environments. Leveraging real-time data analysis, machine learning algorithms, and autonomous decision-making, the protocols autonomously detect and resolve network disruptions, thereby minimizing downtime and optimizing network performance. These protocols are adaptable, capable of adjusting to the unique characteristics of different industrial settings, and can predict and preemptively address potential issues. Furthermore, a computer program product and tangible storage medium facilitate easy implementation, monitoring, and configuration of these protocols. Overall, this invention revolutionizes industrial automation, offering significant cost savings and uninterrupted operation while paving the way for the realization of Industry 4.0 objectives.

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