



A DEVICE AND A METHOD FOR GAINING ACCESS OF A NETWORK IITM Technology Available for Licensing

Problem Statement

- This invention addresses the **need for network security in emerging technologies and resource-constrained devices like IoT devices**. These devices **lack the computational power** for traditional security, and their reliance on system software exposes them to attacks.
- The unmet need is to **establish network trust with minimal resources and without depending on system software**.
- The invention aims to enable **secure transmission of trust scores** while providing a **Zero Trust security approach tailored for emerging technologies**.

Technology Category/ Market

Category – Network Security

Applications – Electronic System & Design Manufacturing (ESDM), IoT (Internet of things),
Industry - Information & Communication Technology, IT - Hardware, Sensors

Market -The global network security market size was worth at **USD 25,196 million in 2021**, which is expected to grow to USD 86,676 million with a **CAGR of 16.7%** during the forecast period.

Key Features / Value Proposition

Technical Perspective:

This innovation offers dynamic **trust assessment, system-software independence, resource-efficient security, customizable trust computation, and secure communication**.

User Perspective:

Users enjoy heightened **security, independence from the device's OS, resource-friendly operation, customization, and trustworthy network access for IoT and emerging tech devices**.

TRL (Technology Readiness Level)

TRL- 5 Technology validated in relevant environment

Intellectual Property

- IITM IDF Ref. 2371
- IN 442044 (PATENT GRANTED)

Technology

Real-time Trust Assessment:

Continuous monitoring and assessment of device trust levels during runtime

System-Software Independence:

Security measures not reliant on the device's operating system.

Resource Efficiency:

Minimizing computational power for security on resource-constrained devices.

Customizable Trust Algorithms:

Flexibility to adapt trust computation to specific security requirements.

Secure Communication:

Ensuring trust scores are transmitted securely to external devices or networks.

Research Lab

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Images

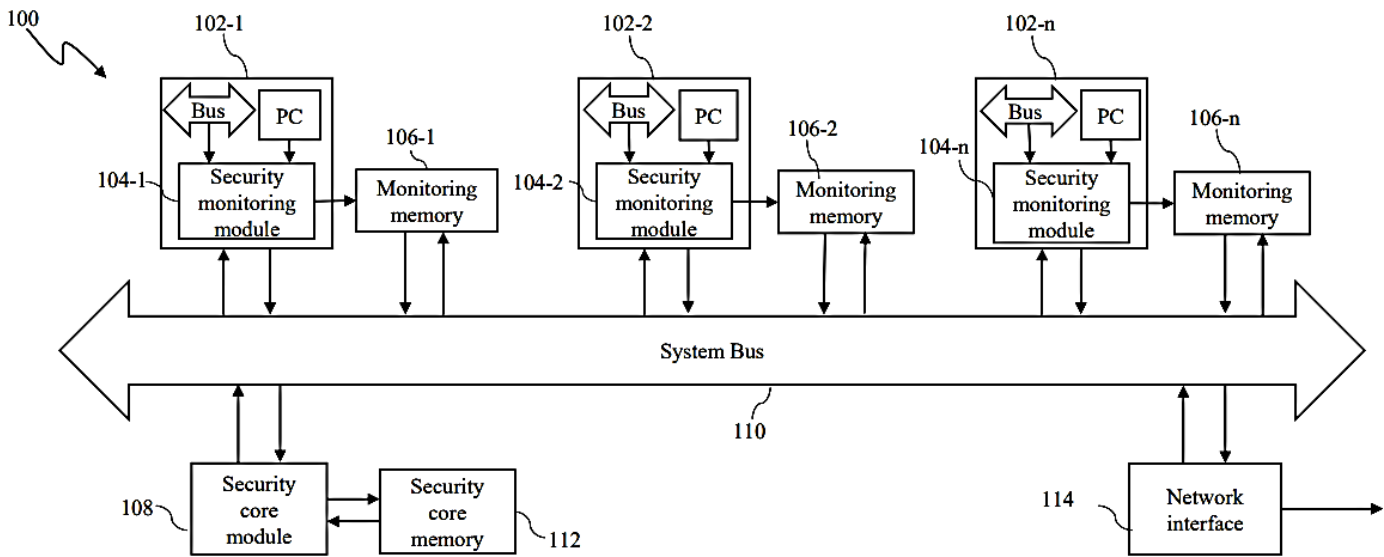


Fig. 1 illustrates a framework of a device for gaining access of a network, in accordance with an embodiment of the present invention

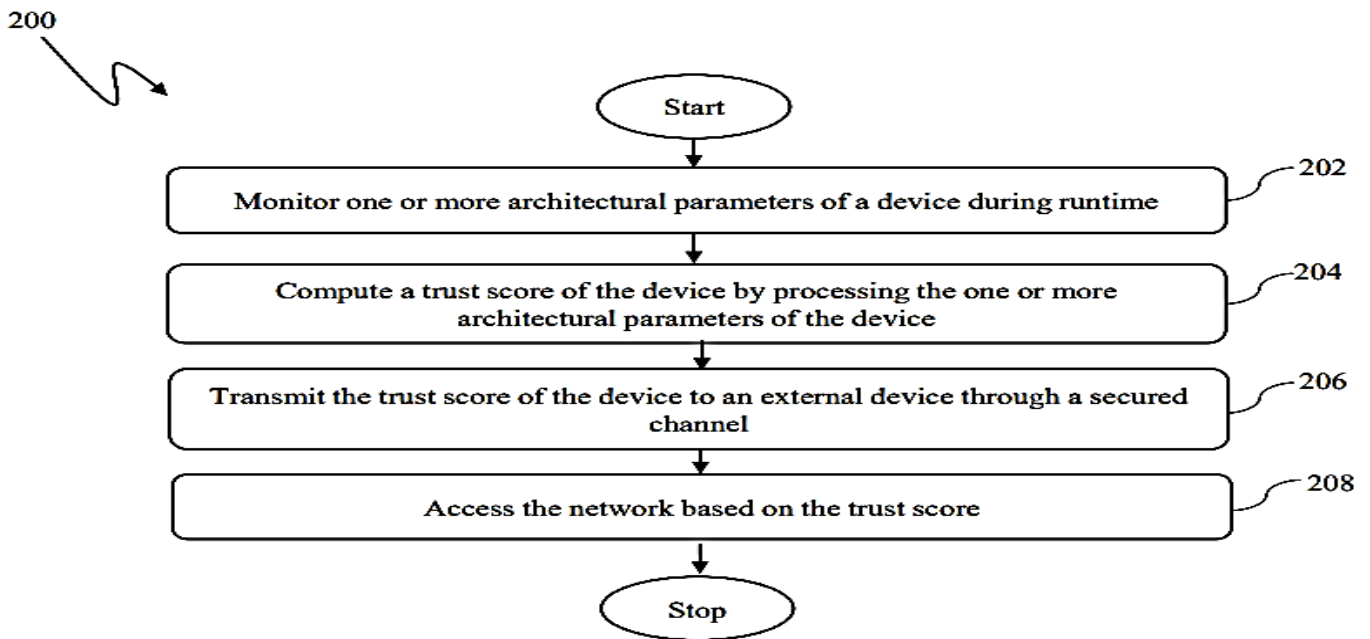


Fig. 2 illustrates a process flow for providing access of a network to a device, in accordance with an embodiment of the present invention.

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