

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511061952 A

(19) INDIA

(22) Date of filing of Application :28/06/2025

(43) Publication Date : 11/07/2025

(54) Title of the invention : AN AI-BASED MALWARE DETECTION USB DEVICE FOR OFFLINE SCANNING

(51) International classification :G06F0021560000, H04L0009400000, G06N0005010000, H04W0012128000, G06N0020200000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)Name of Applicant :

1)NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY

Address of Applicant :19, Knowledge Park-II, Institutional Area, Greater Noida – 201306, Uttar Pradesh, India. -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)RUPENDRA KUMAR KAUSHIK

Address of Applicant :Gyananand Bhawan, Kalinka Vihar Lane No. 3, Majrimafi, IIP Mohkampur Kala-248005, Dehradun, Uttarakhand, India. Greater Noida -----

(57) Abstract :

Present invention discloses an AI-based malware detection USB device (100), comprising a malware scanner (22), an AI module (24), and a control circuit (26) integrated within a USB form factor. The device scans offline systems for malware using AI-based behavioral analysis without requiring internet connectivity. The pre-trained AI module detects both known and zero-day threats by analyzing system activity and files in real-time. Scan results are indicated via secure logs and visual alerts, ensuring portable, offline, and intelligent malware detection.

No. of Pages : 13 No. of Claims : 5