(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :27/06/2025

(21) Application No.202511061356 A

(43) Publication Date : 11/07/2025

(54) Title of the invention : AN IMPROVED AI-INTEGRATED INPUT DEVICE FOR SEAMLESS HUMAN-COMPUTER INTERACTION

(51) International classification	:G06F0003048830, G06F0003010000, G06F0003048800, G06F0009480000, G06F0003041000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

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(57) Abstract :
An improved AI-integrated input device is disclosed, comprising a hybrid touch-sensitive surface (101), embedded AI processor (102), gesture sensors (103), directional microphone array (104), context analyzer (105), and feedback unit (106). A real-time decision core (107) prioritizes multi-modal inputs using AI learning algorithms. The invention supports seamless human-computer interaction through adaptive interpretation of voice, gesture, and touch, enhancing user experience across varied contexts with reduced latency, personalized input mapping, and accessible functionality.

No. of Pages : 14 No. of Claims : 5