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(57) Abstract :

The invention relates to an AI-enabled device for automated speech-to-signal conversion comprising a speech input unit (101), an AI processing module (102), a signal generation unit (103), adaptive learning memory (104), and an output interface (105). The device captures speech, interprets context, and generates real-time operational signals. It features adaptive learning, noise resistance, and low latency, ensuring reliable integration across industrial, medical, and consumer systems. This invention bridges the gap between speech recognition and signal control, offering scalable, versatile, and efficient solutions for automation and assistive technologies.

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