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(57) Abstract :

The present invention discloses an AI-powered webcam device (100) comprising a camera sensor (110), automatic framing unit (122), actuator motor (121), beamforming microphone array (130), AI processor (140), and ambient light sensors (134). The device autonomously centers subjects, suppresses noise, and adjusts lighting via onboard AI. The framing adjusts based on user movement and speech cues, ensuring seamless video-audio clarity. Compact, plug-and-play design makes it ideal for conferencing, education, and digital content creation across environments.

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