Intellectual Property Office

Certificate of Registration for a UK Design

Design number: 6485853

Grant date: 20 November 2025

Registration date: 14 November 2025

This is to certify that,

in pursuance of and subject to the provision of Registered Designs Act 1949, the design of which a representation or specimen is attached, had been registered as of the date of registration shown above in the name of

Dr. Ram Prakash Saini, Ms. Anupama Yadav, Dr. Kalpana Singh, Dr. Shailendra Kumar, Dr. Vinod Kumar , Dr. Mahendra Mani Tiwari, Dr. Satya Prakash Verma, Dr. Nalini Misra , Dr. Brijesh Chandra Tripathi, Dr. Urvashi Kumari

in respect of the application of such design to:

INTERACTIVE COMPUTER DISPLAY PANEL FOR VIRTUAL CLASSROOM SIMULATION

International Design Classification:
Version: 15-2025
Class: 14 RECORDING, TELECOMMUNICATION OR DATA PROCESSING EQUIPMENT
Subclass: 01 EQUIPMENT FOR THE RECORDING OR REPRODUCTION OF SOUNDS OR PICTURES

Version: 15-2025
Class: 14 RECORDING, TELECOMMUNICATION OR DATA PROCESSING EQUIPMENT
Subclass: 02 DATA PROCESSING EQUIPMENT AS WELL AS PERIPHERAL APPARATUS AND DEVICES

THE PATENT OFFICE OFFICIAL

Adam Williams

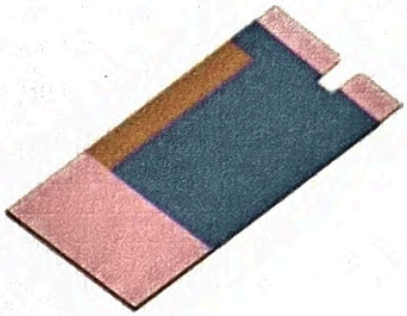
Adam Williams
Comptroller-General of Patents, Designs and Trade Marks
Intellectual Property Office
The attention of the Proprietor(s) is drawn to the important notes overleaf.

Brief of the invention

INTERACTIVE COMPUTER DISPLAY PANEL FOR VIRTUAL CLASSROOM SIMULATION

The invention relates to an "INTERACTIVE COMPUTER DISPLAY PANEL FOR VIRTUAL CLASSROOM SIMULATION".

The device is a thin, rectangular panel, as shown in the perspective view, having a large front interactive touch-display surface occupying the central region of the panel, with upper and lower bezel zones for housing functional elements such as status indicators, microphones and integrated loudspeakers. The front surface is configured to display a virtual classroom interface and to sense multi-touch inputs, handwriting and stylus gestures from a teacher or learner.





On the rear side, as shown in the back view, the panel incorporates segregated compartments for an embedded computer module, power-supply and battery pack, communication module and input/output interface boards. Mounting holes and recessed regions allow the panel to be fixed on a wall, stand or movable trolley. A cluster of apertures on the upper rear side accommodates an AI-enabled camera array and environmental sensors for capturing video, audio and classroom conditions.

The internal electronics include a processor running AI algorithms for face and gaze detection, student-attention estimation, automatic attendance, speech-to-text conversion and real-time translation. The panel further supports AI-based content recommendation, automatic recording and indexing of lectures, gesture-controlled slide navigation, and voice-command operation. Network interfaces (wired and wireless) enable connection to remote learning platforms and cloud services, thereby providing an all-in-one intelligent display panel for immersive virtual classroom simulation and interactive teaching.

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