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(54) Title: METHOD FOR MAKING ADVANCED SMART CARDS WITH INTEGRATED ELECTRONICS USING
ISOTROPIC THERMOSET ADHESIVE MATERIALS WITH HIGH QUALITY EXTERIOR SURFACES

(57) Abstract: Advanced Smart Cards and similar form factors (e.g. documents, tags) having high quality external surfaces of Polyvinylchloride (PVC), Polycarbonate (PC), synthetic paper or other suitable material can be made with highly sophisticated electronic components (e.g. Integrated Circuit chips, batteries, microprocessors, Light Emitting Diodes, Liquid Crystal Displays, polymer dome switches, and antennae), integrated in the bottom layer of the card structure, through use of injection molded thermosetting or thermoplastic material that becomes the core layer of said Advanced Smart Cards. A lamination finishing process can provide a high quality lower surface, and the encapsulation of the electronic components in the thermosetting or thermoplastic material provides protection from the lamination heat and pressure.



WO 2006/101493 A1