| Н         | Sektion             | ELECTRICITY   |
|-----------|---------------------|---|
| H05       | Klasse              | ELECTRIC TECHNIQUES NOT OTHERWISE PROVIDED FOR  |
| H05K      | Unterklasse         | PRINTED CIRCUITS; CASINGS OR CONSTRUCTIONAL DETAILS OF ELECTRIC APPARATUS; MANUFACTURE OF ASSEMBLAGES OF ELECTRICAL COMPONENTS (details of instruments or comparable details of other apparatus not otherwise provided for G12B; thin-film or thick-film circuits H01L 27/01, H01L 27/13; non-printed means for electric connections to or between printed circuits H01R; casings for, or constructional details of, particular types of apparatus, see the relevant subclasses; processes involving only a single technical art, e.g. heating, spraying, for which provision exists elsewhere, see the relevant classes) |
| H05K 1/00 | Hauptgruppe         | Printed circuits (assemblies of a plurality of individual semiconductor or solid state devices H01L 25/00; devices consisting of a plurality of solid state components formed in or on a common substrate, e.g. integrated circuits, thin-film or thick-film circuits, H01L 27/00)  |
| H05K 1/02 | 1-Punkt Untergruppe | . Details   |
| H05K 1/03 | 2-Punkt Untergruppe | Use of materials for the substrate [3]  |
| H05K 1/05 | 3-Punkt Untergruppe | Insulated metal substrate [3]   |
| H05K 1/09 | 2-Punkt Untergruppe | Use of materials for the metallic pattern [3]   |
| H05K 1/11 | 2-Punkt Untergruppe | Printed elements for providing electric connections to or between printed circuits [3]  |
| H05K 1/14 | 2-Punkt Untergruppe | Structural association of two or more printed circuits (providing electric connection to or between printed circuits H05K 1/11 , H01R 12/00)  |
| H05K 1/16 | 1-Punkt Untergruppe | . incorporating printed electric components, e.g. printed resistor, capacitor, inductor   |
| H05K 1/18 | 1-Punkt Untergruppe | . Printed circuits structurally associated with non-printed electric components (H05K 1/16 takes precedence)  |
| H05K 3/00 | Hauptgruppe         | Apparatus or processes for manufacturing printed circuits (photomechanical production of textured or patterned surfaces, materials or originals therefor, apparatus specially adapted therefor, in general G03F; involving the manufacture of semiconductor devices H01L) [3]   |
| H05K 3/02 | 1-Punkt Untergruppe | . in which the conductive material is applied to the surface of the insulating support and is thereafter removed from such areas of the surface which are not intended for current conducting or shielding  |
| H05K 3/04 | 2-Punkt Untergruppe | the conductive material being removed mechanically, e.g. by punching  |
| H05K 3/06 | 2-Punkt Untergruppe | the conductive material being removed chemically or electrolytically, e.g. by photo-etch process  |
| H05K 3/07 | 3-Punkt Untergruppe | being removed electrolytically [3]  |
| H05K 3/08 | 2-Punkt Untergruppe | the conductive material being removed by electric discharge, e.g. by spark erosion  |
| H05K 3/10 | 1-Punkt Untergruppe | . in which conductive material is applied to the insulating support in such a manner as to form the desired conductive pattern  |
| H05K 3/12 | 2-Punkt Untergruppe | using printing techniques to apply the conductive material  |
| H05K 3/14 | 2-Punkt Untergruppe | using spraying techniques to apply the conductive material  |
| H05K 3/16 | 3-Punkt Untergruppe | by cathodic sputtering  |
| H05K 3/18 | 2-Punkt Untergruppe | using precipitation techniques to apply the conductive material   |
| H05K 3/20 | 2-Punkt Untergruppe | by affixing prefabricated conductor pattern   |
| H05K 3/22 | 1-Punkt Untergruppe | . Secondary treatment of printed circuits   |

| Symbol     | Тур                 | Titel  |
|------------|---------------------|--|
| H05K 3/24  | 2-Punkt Untergruppe | Reinforcing of the conductive pattern  |
| H05K 3/26  | 2-Punkt Untergruppe | Cleaning or polishing of the conductive pattern  |
| H05K 3/28  | 2-Punkt Untergruppe | Applying non-metallic protective coatings  |
| H05K 3/30  | 1-Punkt Untergruppe | . Assembling printed circuits with electric components, e.g. with resistor   |
| H05K 3/32  | 2-Punkt Untergruppe | electrically connecting electric components or wires to printed circuits   |
| H05K 3/34  | 3-Punkt Untergruppe | by soldering   |
| H05K 3/36  | 1-Punkt Untergruppe | . Assembling printed circuits with other printed circuits  |
| H05K 3/38  | 1-Punkt Untergruppe | . Improvement of the adhesion between the insulating substrate and the metal [3]   |
| H05K 3/40  | 1-Punkt Untergruppe | . Forming printed elements for providing electric connections to or between printed circuits [3]   |
| H05K 3/42  | 2-Punkt Untergruppe | Plated through-holes [3]   |
| H05K 3/44  | 1-Punkt Untergruppe | . Manufacturing insulated metal core circuits [3]  |
| H05K 3/46  | 1-Punkt Untergruppe | . Manufacturing multi-layer circuits [3]   |
| H05K 5/00  | Hauptgruppe         | Casings, cabinets or drawers for electric apparatus (in general A47B; radio receiver cabinets H04B 1/08; television receiver cabinets H04N 5/64) |
| H05K 5/02  | 1-Punkt Untergruppe | . Details  |
| H05K 5/03  | 2-Punkt Untergruppe | Covers   |
| H05K 5/04  | 1-Punkt Untergruppe | . Metal casings  |
| H05K 5/06  | 1-Punkt Untergruppe | . Hermetically-sealed casings  |
| H05K 7/00  | Hauptgruppe         | Constructional details common to different types of electric apparatus (casings, cabinets, drawers $H05K\ 5/00)$                                 |
| H05K 7/02  | 1-Punkt Untergruppe | . Arrangements of circuit components or wiring on supporting structure   |
| H05K 7/04  | 2-Punkt Untergruppe | on conductive chassis  |
| H05K 7/06  | 2-Punkt Untergruppe | on insulating boards   |
| H05K 7/08  | 3-Punkt Untergruppe | on perforated boards   |
| H05K 7/10  | 2-Punkt Untergruppe | Plug-in assemblages of components  |
| H05K 7/12  | 2-Punkt Untergruppe | Resilient or clamping means for holding component to structure (holding two-part couplings together H01R 13/00)                                  |
| H05K 7/14  | 1-Punkt Untergruppe | . Mounting supporting structure in casing or on frame or rack  |
| H05K 7/16  | 2-Punkt Untergruppe | on hinges or pivots  |
| H05K 7/18  | 1-Punkt Untergruppe | . Construction of rack or frame  |
| H05K 7/20  | 1-Punkt Untergruppe | . Modifications to facilitate cooling, ventilating, or heating   |
| H05K 9/00  | Hauptgruppe         | Screening of apparatus or components against electric or magnetic fields (devices for absorbing radiation from an aerial H01Q 17/00)             |
| H05K 10/00 | Hauptgruppe         | Arrangements for improving the operating reliability of electronic equipment, e.g. by providing a similar stand-by unit                          |
| H05K 11/00 | Hauptgruppe         | Combinations of a radio or television receiver with apparatus having a different main function   |

## H05K 3/40

| Symbol     | Тур                 | Titel  |
|------------|---------------------|--|
| H05K 11/02 | 1-Punkt Untergruppe | . with vehicles  |
| H05K 13/00 | Hauptgruppe         | Apparatus or processes specially adapted for manufacturing or adjusting assemblages of electric components |
| H05K 13/02 | 1-Punkt Untergruppe | . Feeding of components (in general B65G)  |
| H05K 13/04 | 1-Punkt Untergruppe | . Mounting of components   |
| H05K 13/06 | 1-Punkt Untergruppe | . Wiring by machine  |
| H05K 13/08 | 1-Punkt Untergruppe | . Monitoring manufacture of assemblages  |