Title (en)

METHOD FOR SHORTENING THE PROCESS TIME DURING THE SOLDERING OF ELECTRIC OR ELECTRONIC COMPONENTS BY MEANS OF ELECTROMAGNETIC INDUCTION HEATING

Title (de)

VERFAHREN ZUR PROZESSZEITVERKÜRZUNG BEIM LÖTEN ELEKTRISCHER ODER ELEKTRONISCHER BAUTEILE MITTELS ELEKTROMAGNETISCHER INDUKTIONSERWÄRMUNG

Title (fr)

PROCÉDÉ DE RACCOURCISSEMENT DES DURÉES DE TRAITEMENT LORS DU BRASAGE DE COMPOSANTS ÉLECTRIQUES OU ÉLECTRONIQUES AU MOYEN D'UN CHAUFFAGE PAR INDUCTION ÉLECTROMAGNÉTIQUE

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Application

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Abstract (en)

[origin: WO2016038144A1] The invention relates to a method for shortening the process time during the soldering of electric or electronic components by means of electromagnetic induction heating, in particular the soldering of electric contact elements to solder connection surfaces that are applied to a non-metallic substrate, in particular a pane of glass. According to the invention, an electric contact element is first produced, designed as a solder foot, made of a material with an iron-nickel or iron-chromium alloy base. Subsequently, a lead-free connecting material is applied to the solder foot. After the solder foot has been positioned on the respective solder connection surface, the solder foot is inductively heated by means of high frequency energy with increased heating of the solder foot material and reduced heating of the silver-containing material of the respective solder connection surface. The soldering stage is completed after a time of <10 s, in particular within a time of <4 to 6s. The invention also relates to a contact element in the form of a special solder foot.

IPC 8 full level

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