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**(54) Title (EN):** METHOD FOR PRODUCING AN ELECTRODE WITH A LOW HYDROGEN CONTENT AND LOW HUMIDITY ABSORPTION

**(54) Title (FR):** PROCÉDÉ DE PRODUCTION D'ÉLECTRODE À FAIBLE TENEUR EN HYDROGÈNE ET FAIBLE ABSORPTION D'HUMIDITÉ

**(54) Title (PT):** PROCESSO PARA PRODUÇÃO DE ELETRODO COM BAIXO TEOR DE HIDROGÊNIO E BAIXA ABSORÇÃO DE UMIDADE

**(57) Abstract:**

**(EN):** The invention consists in a method for producing an electrode coated with chemical elements that induce a reaction with the humidity in the electric arc, eliminating water (H<sub>2</sub>O) by a chemical reaction, drastically reducing the hydrogen (H<sub>2</sub>) content in the solder, and a curing oven used at a temperature of 360° for five minutes for curing the polymer, preserving the physical and chemical properties of the electrodes with a low hydrogen content and reactivity to any residual humidity without the need to subject the electrode to a treatment prior to its use.

**(FR):** L'invention concerne un procédé de production d'une électrode revêtue d'éléments chimiques induisant une réaction avec l'humidité dans l'arc électrique, éliminant l'eau (H<sub>2</sub>O) par réaction chimique, réduisant de façon drastique la teneur en hydrogène (H<sub>2</sub>) dans le métal de brasure, un four de durcissement étant utilisé à une température de 360°C pendant une durée de cinq minutes pour le durcissement du polymère, permettant ainsi de conserver les propriétés physiques et chimiques des électrodes avec de faibles teneurs en hydrogène et une réactivité avec toute humidité résiduelle, sans nécessité de traitement préalable de l'électrode avant son utilisation.

**(PT):** Consiste a um processo para a produção de eletrodo revestido com elementos químicos que proporcionam a reação com a umidade no arco elétrico, elimina a água (H<sub>2</sub>O) por reação química, diminuindo drasticamente o teor de hidrogênio (H<sub>2</sub>) no metal de solda, utiliza a uma temperatura de 360°, o forno de cura com uma duração de cinco minutos de cura do polímero, mantém as

propriedades físicas e químicas dos eletrodos com baixos teores de hidrogênio, reativos com qualquer umidade residual, sem a necessidade de tratamento prévio do eletrodo antes do seu uso.

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**Declarations:**

Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv)) for the purposes of the designation of the United States of America