

# Method of producing wire from Cu-Ag alloys

#### Description of the solution:

The object of the invention is a method for producing wires, including microwires, from Cu-Ag alloys, especially from Cu alloys with  $(3\div7.9)$ %Ag content by weight. These alloys, obtained in the form of bars in a continuous melting and casting line, are subjected to appropriately selected heat treatment sequences and a drawing process producing wires characterised by excellent mechanical and electrical properties.

## Benefits of the solution:

- A consistent and integrated method for the production of finished Cu-Ag alloy bars characterised by high chemical purity and structure, consistently over the entire length of the casting.
- Ability to shape a set of high electrical and mechanical properties of the final product.
- · Reduction in manufacturing costs through appropriately selected thermo-mechanical treatments.
- Ability to select the optimum conditions of the thermo-mechanical treatment sequence to achieve the required strength and electrical properties.
- Favourable weight ratio in relation to the strength parameters of the products obtained.

## Area of application:

Power engineering (power transmission, conductive materials in power applications), materials engineering, equipment design.

## **Technology readiness level:**

9

## Intellectual property:

Inventions: PAT.221274, EP2873475

#### **Owner:**

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