Method for Permanent Connection of Two Metal Surfaces

Abstract

The invention relates to a process for the production of a permanent, electrically conductive connection between a first metal surface of a first substrate and a second metal surface of a second substrate with the following method steps, in particular the course of the method:

- Conditioning of the first and second metal surfaces in such a way that in a connection of the metal surfaces, in particular in a time period of a few minutes after the conditioning, a permanent, electrically conductive connection - produced at least primarily by substitution diffusion between in particular similar, preferably identical, metal ions and/or metal atoms of the two metal surfaces – can be produced,
- Orientation and connection of the first and second metal surfaces, whereby during the conditioning, orientation and connection, a process temperature of at most 300°C, in particular at most 260°C, preferably 230°C, even more preferably 200°C, especially preferably at most 180°C, and ideally at most 160°C, is not exceeded.