

Title (en)
SYSTEM AND METHOD FOR WELDING TWO THERMOPLASTIC WORKPIECES

Title (de)
SYSTEM UND VERFAHREN ZUM VERSCHWEISSEN VON ZWEI THERMOPLASTISCHEN WERKSTÜCKEN

Title (fr)
SYSTÈME ET PROCÉDÉ PERMETTANT LE SOUDAGE DE DEUX PIÈCES THERMOPLASTIQUES

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Application
EP 20722544 A 20200427

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Abstract (en)
[origin: WO2020239341A1] The invention relates to a system (2) and a method for welding two thermoplastic workpieces. The system (2) has an ultrasonic tool (8), a support (10) and a cooling unit (12). The ultrasonic tool (8) is designed to generate mechanical vibrations. The system (2) is designed to clamp together the workpieces in the receiving region (16) by means of the ultrasonic tool (8) and the support (10) if at least one fastening portion (18) of the workpieces (4, 6) opposite one another is arranged in the receiving region (16). The ultrasonic tool (8) is designed to introduce the mechanical vibrations into the fastening portion (18) of the workpieces (4, 6) in order to weld the workpieces (4, 6) in a joining zone (20). The cooling unit (12) is designed to cool, with cooling fluid (22), at least a part of the fastening portion (18) of the workpieces (4, 6) and/or a cooling portion (24) of the workpieces (4, 6) directly adjacent to the fastening portion (18).

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Citation (search report)
See references of WO 2020239341A1

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