

Title (en)
METHODS OF AND SYSTEM FOR REDUCING SPATTER IN A PULSE ARC WELDING PROCESS

Title (de)
VERFAHREN UND SYSTEM ZUR VERRINGERUNG VON SCHWEISSSPRITZERN BEI EINEM IMPULSLICHTBOGENSCHWEISSVERFAHREN

Title (fr)
PROCÉDÉ POUR COMMANDER UN SYSTÈME DE SOUDAGE À L'ARC POUR RÉDUIRE LA PROJECTION

Publication
EP 2629918 A2 20130828 (EN)

Application
EP 11817485 A 20111024

Priority

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- IB 2011002532 W 20111024

Abstract (en)
[origin: WO2012052839A2] An electric arc welder and a method for performing a pulse welding process producing reduced spatter. The welder produces a current between an advancing electrode and a work- piece. The welder includes a short-detecting capability for detecting a short condition upon occurrence of a short circuit between the advancing electrode and the workpiece. The welder may also include a switching module in the welding circuit path of the welder having an electrical switch and a resistive path. Times of occurrence of short intervals can be tracked and a blanking signal can be generated based on the tracked short intervals to anticipate a next short interval in a next pulse period of the pulsed welding process. The blanking signal can be used to reduce a welding current in the welding circuit path by introducing additional resistance into the welding circuit path via the switching module, or by controlling a portion of a waveform of the welding process during the blanking interval.

IPC 8 full level
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CPC (source: EP US)
B23K 9/091 (2013.01 - EP US); **B23K 9/095** (2013.01 - EP US); **B23K 9/1043** (2013.01 - EP US)

Citation (search report)
See references of WO 2012052839A2

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