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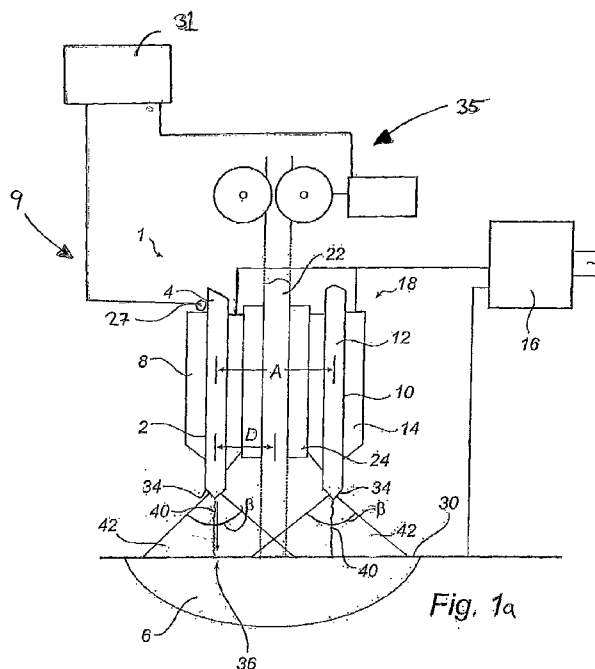
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(54) Title: METHOD AND SYSTEM FOR SUBMERGED ARC WELDING



(57) Abstract: The invention relates to a method for submerged arc welding comprising the steps of guiding a first hot wire (4; 4a, 4b) towards a work piece and guiding a cold wire (22; 22a, 22b) at a variable feed speed. The method further comprises the steps of continuously measuring, during a welding phase, at least a first active welding parameter related to at least said first hot wire (4; 4a, 4b) adjusting the cold wire (22; 22a, 22b) feed speed in dependence on at least first active welding parameter variations, to maintain high welding stability and high weld quality. The invention also relates to a system (9) for carrying out the method. The system (9) comprises hot wire feeding means (150) for feeding a first hot wire (4; 4a, 4b) towards a work piece and cold wire feeding means (35) for feeding a cold wire (22; 22a, 22b) at a variable cold wire (22; 22a, 22b) feed speed and a control unit (31) for controlling the second wire feeding means (35). The system (9) also comprises measuring means (27) adapted to continuously measure at least a first active welding parameter related to said first hot wire (4; 4a, 4b). The control unit (31) determines target values for the cold wire (22; 22a, 22b) feed speed, each target value corresponding to a first active welding parameter value and controls said second wire feeding means (35) to adjust said cold wire (22; 22a, 22b) feed speed to said target values.