Title (en)

PROCESS AND ARC SPRAY NOZZLE FOR CUTTING COMPONENT SURFACES BY MELTING OF WIRES IN AN ELECTRIC ARC

Publication

EP 0239584 B1 19900117 (DE)

Application

EP 86905225 A 19860917

Priority

DE 3533966 A 19850924

Abstract (en)

[origin: DE3533966C1] Process and spray nozzle in particular for cutting component surfaces of wires in an electric arc. The molten particles being conveyed by a dispersion gas, whereby the gas is directed there a nozzle onto the arc and is fed if necessary by lateral flow around the wire feed nozzles, for example as an enveloping or protective gas around the exterior of the arc. A solution is provided whereby the atmosphere surrounding the spraying process can be influenced, in particular with which an influence can be exerted on the very small molten particles in the spray jet, whereby also a highly symmetrical construction of the spray jet should be made possible. This can be achieved using the process owing to the fact that different gases or gas mixtures are used for the dispersion gas on the one end and the enveloping gas on the other. The spraying nozzle (1) is provided with a dispersion gas supply nozzle (7) in the region of the wire feed nozzles (4) and a gas-actuated annular diaphragm (10, 11), roughly in the plane of the arc formation (6), and is characterized by the fact that the annular aperture (10, 11) is equipped with its own gas supply (12).

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IPC 8 full level

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