

Title (en)

METHOD OF HEATING THE SURFACE OF A SUBSTRATE BY MEANS OF A HOT GAS JET, PARTICULARLY WITH SIMULTANEOUS SUPPLY OF COATING MATERIAL USING THE FLAME SPRAYING PROCESS, AND BURNER FOR THE REALIZATION OF SAID METHOD

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Application

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Priority

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Abstract (en)

[origin: ES8306526A1] The invention relates to a process for heating the surface of a substrate and to a burner particularly as part of a spray gun suitable for carrying out the process of flame spraying. In order to improve flame stability and to increase the output, compressed air is supplied using annular guide plates arranged in cascade fashion, one above the other and one behind the other in various planes in the direction of the jet. As a result of this, kinetic energy is introduced into the flow of hot gases as the air volume increases, so that almost complete combustion of the hot gases can be achieved at relatively low end temperatures. The drop-off in temperature of the hot gases in the direction of flow starting from the mouth of the burner is relatively small. Consequently, it is also possible to heat substrates uniformly which, as a result of their particular shape, have a varying spacing from the mouth of the burner. Using the burner, it is even possible to heat shrink films used for packaging objects without overheating, leading to local destruction of the material, occurring.

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IPC 8 full level

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