

Title (en)
COLD GAS SPRAYING SYSTEM

Title (de)
KALTGASSPRITZANLAGE

Title (fr)
INSTALLATION D'INJECTION DE GAZ FROID

Publication
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Application
EP 09729463 A 20090324

Priority
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Abstract (en)
[origin: CA2721114A1] The invention relates to a cold gas spraying system (10) comprising a gas heating device (90) and a stagnation chamber (60) that is connected to the gas heating device (90). A Laval nozzle (20) that discharges a gas stream with incorporated particles (T) at an ultrasonic speed at the outlet end is connected to the stagnation chamber. Cold gas spraying systems of said type can be used, for example, for producing a coating on a surface by means of the accelerated particles. In order to achieve an even better layer quality when producing a coating, at least one section of the cold gas spraying system that is located downstream of the gas heating device in the direction of flow of the gas is thermally protected, the internal wall of said section being lined with or made of a ceramic insulation material which has a heat conductivity of less than 20 W/Km. The lining can be formed by a replaceable insert (110, 140), for example, which separates the internal wall of the section from the gas stream. Such an insert can have a sleeve, for example, a section of which is cylindrical and another section of which is conical, especially truncated, the cylindrical section being inserted into the stagnation chamber and the conical section being inserted into the convergent subsection of the Laval nozzle.

IPC 8 full level
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Cited by
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