

Title (en)

METHOD OF HEATING THE BLAST GAS OF A BLAST FURNACE WITH A PLASMA GENERATOR

Publication

EP 0170566 B1 19871125 (FR)

Application

EP 85401313 A 19850628

Priority

FR 8410467 A 19840702

Abstract (en)

[origin: US4670048A] Method for heating the reducing gas of a blast furnace by means of a plasma generator. The reducing gas flows through a pipe into which issues the nozzle of the plasma generator. The pipe leads towards a tuyere of injection into the blast furnace, and the axis of said nozzle converging towards that of the pipe. The method is characterized in that the acute angle A between the axis of the nozzle and the axis of the pipe is at the most equal to 50 DEG , in that the distance 1 separating the point of intersection of the axis of the pipe with the axis of the nozzle from the center of the outlet orifice of the nozzle is at the most equal to $D/2\sin A$, D being the inner diameter of the reducing gas inlet pipe, and in that the ratio D/d , in which d is the inner diameter of the outlet orifice of the nozzle is at least equal to 1.5. The object of the method is to eliminate wear of the reducing gas pipe by means of the jet of plasma.

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