

Title (en)

METHOD OF COMBUSTION AND IMPULSE CURRENT CONTROLLED FUEL/OXYGEN LANCE

Title (de)

VERBRENNUNGSVERFAHREN UND IMPULSSTROMGESTEUERTE BRENNSTOFF/SAUERSTOFFLANZE

Title (fr)

PROCEDE DE COMBUSTION ET LANCE A COMBUSTIBLE/OXYGENE COMMANDEE PAR COURANT PULSE

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Application

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Abstract (en)

[origin: WO0244617A1] The invention relates to a method and an impulse current controlled fuel/oxygen lance for the after-burning of products from incomplete combustion. According to the invention, oxygen, introduced into the mixing chamber (8) of the fuel/oxygen lance as oxidising agent, is heated to at least 560$^{\circ}$C, by the combustion reaction products from combustion of fuel in the mixing chamber (8) and injected into the combustion zone at a speed of at least Mach 0.8. The disclosed thermal jet combustion process guarantees substantially improved heat transfer relationships in the after-burning of products of incomplete combustion in the combustion zone, by means of an impulse current controlled oxygen input matching the current process conditions with a low specific oxygen consumption.

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