

Title (en)
METHOD AND APPARATUS FOR HEAT TREATMENT

Title (de)
VERFAHREN UND VORRICHTUNG ZUR WÜRMEBEHANDLUNG

Title (fr)
PROCEDE ET APPAREIL DE TRAITEMENT THERMIQUE

Publication
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Application
EP 03798637 A 20030925

Priority
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Abstract (en)
[origin: WO2004029511A1] A method and an apparatus for heat-treatment of materials, preferably metals, are provided. The method comprises the following steps: providing and maintaining a flame by supplying a burner with fuel and gas containing at least 80 percent by volume oxygen; creating an oxygen-hot exhaust mixture by recirculating exhausts from the flame to the gas containing oxygen by means of an ejector effect; mixing the oxygen-exhaust mixture and the fuel; and providing a secondary recirculation by recirculating exhausts from the flame to the oxygen-exhaust-fuel mixture. The method and apparatus allow for extremely low NOx emissions and high efficiency, resulting in an environmentally friendly and at the same time cost effective process.

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