

Title (en)
COMBUSTION MATERIAL PROCESS AND RELATED APPARATUS

Title (de)
VERBRENNUNGSMATERIALVERFAHREN UND VERWANDTE VORRICHTUNG

Title (fr)
PROCÉDÉ POUR MATÉRIAUX DE COMBUSTION ET APPAREIL ASSOCIÉ

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Application
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Abstract (en)
[origin: WO2009139017A2] The present invention relates to a process (1) for the combustion of materials (X), comprising the steps of: (a) inserting the preferably compacted materials (X) in a reaction chamber (3) and closing the chamber (3); (b) injecting a flow of combustible gas and a corresponding flow of a comburent gas, which are in the correct stoichiometric ratio to each other, into the reaction chamber (3), so as to activate combustion of the materials (X); (c) continuing the thermochemical reaction of the oxidizable elements, for example carbon, with the oxygen present, without introducing any more gases; (d) injecting comburent gas to feed the thermochemical reactions of the oxidizable elements present in the materials (X), until the increase in temperature stops; (e) opening a throttle valve (5) to expel the gases, while continuing to introduce comburent gas at a substantially constant pressure until all remaining carbon has been oxidized, the strongly bound oxides have been subjected to pyrolysis and the metals present have been oxidized.

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