

Title (en)  
PARTIAL OXIDATION SYSTEM.

Title (de)  
SYSTEM ZUM TEILOXIDIEREN.

Title (fr)  
SYSTEME D'OXYDATION PARTIELLE.

Publication  
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Application  
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Priority  
US 22890981 A 19810127

Abstract (en)  
[origin: WO8202548A1] Method and apparatus for partial oxidation of hydrocarbonaceous gases, wherein a hydrocarbonaceous gas is preheated, reacted with oxygen, and quenched by means of a rotating matrix comprising glassy ceramic fibers. Such a rotating matrix may be constructed and compartmented by a method and apparatus which utilizes the inherent tensile strength properties of the fibers to provide strength to the compartment walls. Such partial oxidation method and apparatus is especially useful in a direct, integrated process for the production of tert-butyl ethers, wherein the product of partially oxidizing methane and isobutane are caused to be methanol and isobutylene, which intermediates are directly recovered and combined to form methyl tert-butyl ether by method and apparatus of the invention. Furthermore, byproducts of such partial oxidation may also be converted to useful tert-butyl ethers.

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