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(54) **Title:** SELECTIVE OXIDATION AGENT OF HYDROCARBONS TO SYNTHESIS GAS BASED ON SEPARATE PARTICLES OF O-CARRIER AND HYDROCARBON ACTIVATOR

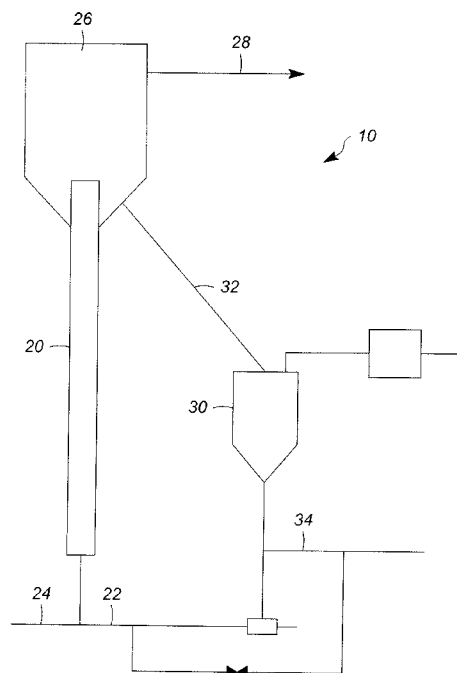


FIGURE 1

(57) **Abstract:** A solid material is presented for the partial oxidation of natural gas. The solid material includes a solid oxygen carrying agent and a hydrocarbon activation agent. The material precludes the need for gaseous oxygen for the partial oxidation and provides better control over the reaction.

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INTERNATIONAL SEARCH REPORT

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PCT/US2008/080710**A. CLASSIFICATION OF SUBJECT MATTER*****B01J 23/00(2006.01)i***

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 8: B01J 23/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKIPASS, PAJ

Search terms: syngas, hydrocarbon, oxygen carrier, metal oxide

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2006/0093550 A1 (Vasant Ramchandra Choudhary et al.) 04 May 2006 see the abstract.	1-10
A	US 2004/0192792 A1 (ConocoPhillips Company) 30 September 2004 see the abstract and claim 1.	1-10
A	EP 0303438 A2 (Davy Mckee Corporation) 15 February 1989 see the abstract and claim 1.	1-10
A	US 4,844,837 A (Engelhard Corporation) 04 July 1989 see the abstract.	1-10

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

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