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(54) Title: A PROCESS FOR THE PRODUCTION OF OLEFINS THROUGH FISCHER-TROPSCH BASED SYNTHESIS

- Key**
- NG: Natural Gas/Light Hydrocarbons
 - HDS: Hydrodesulfurization
 - SR: Steam Reforming
 - HPR: Heat and Power Recovery
 - SGP: Syngas Purification
 - STO: Syngas to Olefins
 - HRC: Heat Recovery and Cooling
 - AGR: Acid Gas Removal
 - OS: Olefin Separation
 - RGS: Recycle Gas Separation
 - HC: Hydrocarbon
 - RSR: Reverse Water Gas Shift

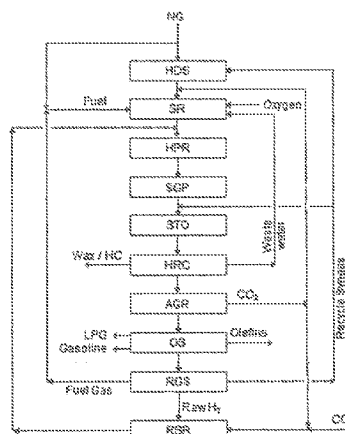


Fig 1

(57) Abstract: The present disclosures and inventions relate to a method comprising: a) introducing a natural gas; b) reforming the natural gas; wherein the reforming step comprises contacting the natural gas with steam to produce a syngas; c) converting the syngas to a product mixture comprising an olefin, carbon dioxide, and hydrogen; wherein the converting step comprises contacting the syngas with a Co/Mn catalyst; and d) converting at least some process hydrogen and at least some process and/or external carbon dioxide to syngas by a reverse water gas shift reaction, and recycling such reverse water gas shift reaction produced syngas to before step c).

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER INV. C10K3/02 C10G2/00 C10K3/06 ADD.				
According to International Patent Classification (IPC) or to both national classification and IPC				
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Minimum documentation searched (classification system followed by classification symbols) C10K C10G C01B				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched				
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C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
X	US 2011/118365 A1 (STEINER JOCHEN [DE] ET AL) 19 May 2011 (2011-05-19)	1,2,4,7, 12-18, 20,22		
Y	claims 1-14 figures 1-4 paragraphs [0043] - [0048] -----	3,5,6, 8-11,19, 21,23		
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A	claims 1-22 figures 1-12 column 25, lines 9-18 ----- -/--	1,2,4, 7-18, 20-22		
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"><input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C.</td> <td style="width: 50%; border: none;"><input checked="" type="checkbox"/> See patent family annex.</td> </tr> </table>			<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C.	<input checked="" type="checkbox"/> See patent family annex.
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