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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

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[Continued on next page]

(54) Title: METHOD FOR PRODUCING HIGH VCM COKE

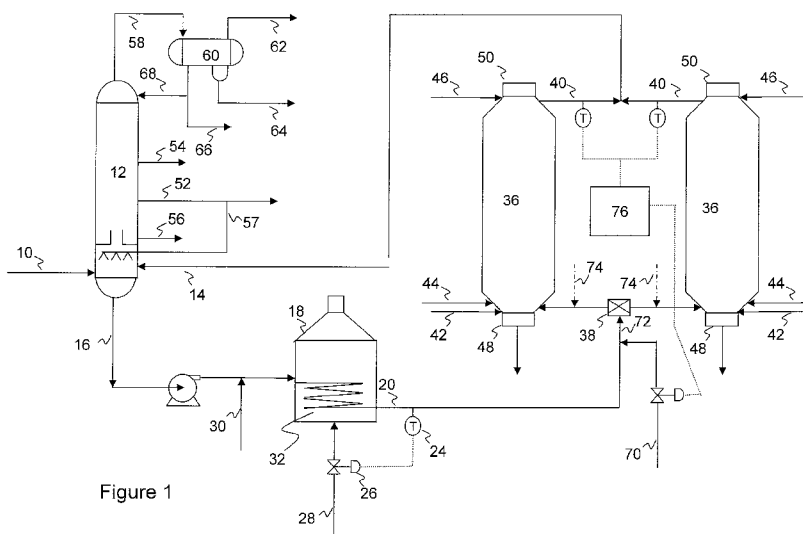


Figure 1

(57) Abstract: A process and apparatus for improving the production of coke having a high volatile combustible material content are disclosed. The process may include, for example: heating a coker feedstock to a coking temperature to produce a heated coker feedstock; contacting the heated coker feedstock with a quench medium to reduce a temperature of the heated coker feedstock and produce a quenched feedstock; feeding the quenched feedstock to a coking drum; subjecting the quenched feedstock to thermal cracking in the coking drum to (a) crack a portion of the quenched feedstock to produce a cracked vapor product, and (b) produce a coke product having a volatile combustible material (VCM) concentration in the range from about 13 % to about 50 % by weight, as measured by ASTM D3175.



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A. CLASSIFICATION OF SUBJECT MATTER*C10B 57/00(2006.01)i, C10L 5/04(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)

C10B 57/00; C10G 9/36; C07C 3/30; C10G 9/00; C10G 9/14; C10G 9/16; C10G 9/20

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: coker, quench medium, thermal cracking, VCM

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 03923921 A (KOHFELDT WALTER C.) 02 December 1975 See claim 1, column lines 49-68, column 3 lines 7-25 and figure 2	1-20
A	US 04279734 A (GWYN; JOHN E.) 21 July 1981 See claim 1, column 4 lines 28-60 and figure 1	1-20
A	US 2006-0032788 A1 (ROGER ETTER) 16 February 2006 See claims 1,4 and figures 1,6,8	1-20
A	EP 2330175 A2 (EXXONMOBIL CHEMICAL PATENTS INC.) 08 June 2011 See claim 1, paragraphs [0067]-[0072] and figure 1	1-20

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

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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