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(54) Title: PROCESS FOR THE PRODUCTION OF ETHYLENE

(57) Abstract: The invention relates to a process for the production of ethylene, comprising the steps of a) thermally converting, by a pyrolysis or a partial oxidation process, a feed charge containing methane into an acetylene containing effluent, and b) in situ hydrogenating, by a non-catalytic reaction, the acetylene produced in the first step into ethylene by intimately mixing the acetylene containing effluent with an ethane feed. The process according to the invention is more efficient than other synthesis schemes, while simplifying the overall process design. This process thus offers an economically attractive scheme for mass production of ethylene from natural gas, based on a well-known and proven acetylene route.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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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)
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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 practical, search terms used)

EPO-Internal, PAJ, WPI Data, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
A	US 5 270 016 A (ALAGY ET AL) 14 December 1993 (1993-12-14) column 3, line 6 - line 10 column 6, line 27 - line 38 column 11, line 41 - line 49 example 2	1-16
A	US 4 726 913 A (BROPHY ET AL) 23 February 1988 (1988-02-23) column 1, line 49 - column 2, line 15 column 2, line 52 - column 3, line 17 -/-	1-16

☒ Further documents are listed in the continuation of Box C

☒ See patent family annex

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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

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C(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate of the relevant passages	Relevant to claim No
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INTERNATIONAL SEARCH REPORT

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International application No

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