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(71) Applicant (for all designated States except US): **SAUDI BASIC INDUSTRIES CORPORATION** [SA/SA]; P.O. Box 5101, Riyadh 11422 (SA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MAMEDOV, Aggadin** [AZ/SA]; P.O. Box 42503, 11551 Riyadh (SA). **AL-WAHABI, Saeed** [SA/SA]; P.O. Box 42503, Riyadh, 11551 (SA). **LIN, Yungyi** [US/SA]; P.O. Box 42503, Riyadh, 11551 (SA). **ABDELGHANI, Mohamed, Sabir** [GB/SA]; P.O. Box 42503, Riyadh, 11551 (SA). **AL-AL-WAN, Akram** [SA/SA]; P.O. Box 42503, Riyadh, 11551 (SA).

(74) Agent: **BOOTSMA, Jan, Petrus, Clementius**; SABIC Corporate Patent Group, P.O. Box 3008, NL-6160 GA Geleen (NL).

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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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<p>According to International Patent Classification (IPC) or to both national classification and IPC</p>		
<p>B. FIELDS SEARCHED</p>		
<p>Minimum documentation searched (classification system followed by classification symbols)                  C07C</p>		
<p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p>		
<p>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</p>		
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p>		
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
<p><input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C.      <input checked="" type="checkbox"/> See patent family annex.</p>		
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<p>Name and mailing address of the ISA/                  European Patent Office, P.B. 5818 Patentlaan 2                  NL - 2280 HV Rijswijk                  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,                  Fax: (+31-70) 340-3016</p>		<p>Authorized officer</p> <p>O'Sullivan, Paul</p>

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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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