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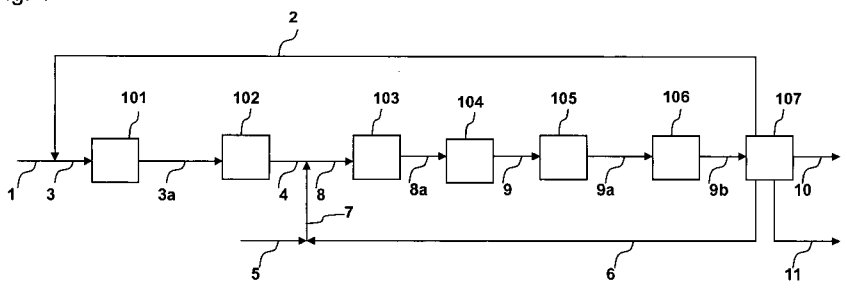
(54) Title: PROPYLENE PRODUCTION

Fig. 1



(57) Abstract: A propylene production process is disclosed. The process comprises (a) reacting a feed stream comprising isobutene in the presence of a skeletal isomerization catalyst to obtain an isomerized stream comprising C4 olefins; and (b) reacting the isomerized stream with ethylene in the presence of a metathesis catalyst to form a metathesis product stream comprising propylene, C4 olefins, and C5+ olefins. The metathesis reaction pressure is equal to or lower than that of the skeletal isomerization.

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INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
INV. C07C6/04 C07C11/06
ADD.

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)
C07C

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, BEILSTEIN 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.
Y	US 6 977 318 B2 (BRIDGES ROBERT S [US]) 20 December 2005 (2005-12-20) claims 1,7,9; example example	1-12
A	US 7 074 976 B2 (POWERS DONALD H [US] ET AL) 11 July 2006 (2006-07-11) claims 1,2,6,7 example example	1-12
Y	US 2007/129589 A1 (IWAMOTO MASAKAZU [JP] ET AL) 7 June 2007 (2007-06-07) examples 2,3	1-12
Y	US 2008/154077 A1 (BOZZANO ANDREA G [US] ET AL) 26 June 2008 (2008-06-26) claims 9,10 figures 2,3 paragraphs [0036], [0053], [0077]	1-12

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
9 June 2010	24/06/2010

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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