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US

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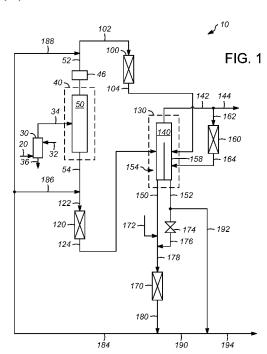
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#### Published:

— with international search report (Art. 21(3))

[Continued on next page]

## (54) Title: PROCESS FOR SEPARATING AT LEAST ONE OLIGOMERIZED EFFLUENT



(57) Abstract: One exemplary embodiment can be a process for separating at least one oligomerized effluent. The process can include providing an effluent from at least one of a first oligomerization zone for producing at least one of a C9 and a C12 hydrocarbon and a second oligomerization zone for producing at least one of a C8 and a C12 hydrocarbon, providing at least a portion of the effluent to a separation zone, and providing at least one stream from the separation zone to a hydrotreatment zone.



(88) Date of publication of the international search report: 17 January 2013

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### A. CLASSIFICATION OF SUBJECT MATTER

C10G 50/00(2006.01)i, C10G 67/00(2006.01)i, C10G 69/12(2006.01)i, C07C 7/00(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)

C10G 50/00; C07C 319/02; C07C 2/12; B01J 19/00; C07C 2/00; C07C 2/04

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: hydrocarbon, first oligomerization zone, second oligomerization zone, separation zone, hydrotreatment zone

#### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2010/0056834 A1 (PHILLION et al.) 04 March 2010 See the abstract; claims; figure 1; paragraphs [0039]-[0048].	1-3
A	US 7476773 B2 (LOURET et al.) 13 January 2009 See the abstract; claims; figures; column 7, line 7 - column 8, line 13.	1-3
A	US 7507868 B2 (DUNCAN et al.) 24 March 2009 See the abstract; claims; column 2, line 55 - column 4, line 8.	1-3
A	US 2004/0210093 A1 (GROTEN et al.) 21 October 2004 See the abstract; claims; figures; paragraphs [0021]-[0024].	1-3

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority
"A"	document defining the general state of the art which is not considered		date and not in conflict with the application but cited to understand
	to be of particular relevance		the principle or theory underlying the invention
"E"	earlier application or patent but published on or after the international	"X"	document of particular relevance; the claimed invention cannot be
	filing date		considered novel or cannot be considered to involve an inventive
"L"	document which may throw doubts on priority claim(s) or which is		step when the document is taken alone
	cited to establish the publication date of citation or other	"Y"	document of particular relevance; the claimed invention cannot be
l	special reason (as specified)		considered to involve an inventive step when the document is

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

See patent family annex.

Date of the actual completion of the international search
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Date of mailing of the international search report
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Name and mailing address of the ISA/KR

than the priority date claimed



Korean Intellectual Property Office 189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan City, 302-701, Republic of Korea

Further documents are listed in the continuation of Box C.

document referring to an oral disclosure, use, exhibition or other

document published prior to the international filing date but later

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2011/062762

Box No. II	Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)				
This interna	tional search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:				
	nims Nos.: cause they relate to subject matter not required to be searched by this Authority, namely:				
2 <b>5</b> Cl	sima Naa : 9 and 0				
bec	nims Nos.: 8 and 9 cause they relate to parts of the international application that do not comply with the prescribed requirements to such an ent that no meaningful international search can be carried out, specifically:				
	he claims refer to unsearchable claims which do not comply with PCT Rule 6.4(a). Thus, it is not possible to make teaningful search regarding claims 8 and 9.				
	nims Nos.: 4-7 and 10 cause they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).				
Box No. III	Observations where unity of invention is lacking (Continuation of item 3 of first sheet)				
This Interna	tional Searching Authority found multiple inventions in this international application, as follows:				
	all required additional search fees were timely paid by the applicant, this international search report covers all searchable ims.				
	all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment any additional fee.				
	only some of the required additional search fees were timely paid by the applicant, this international search report covers y those claims for which fees were paid, specifically claims Nos.:				
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:					
Remark on	The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.  The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.  No protest accompanied the payment of additional search fees.				

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

# PCT/US2011/062762

Information on patent family members			PCT/US2011/062762	
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