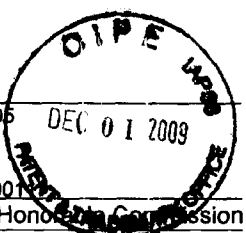


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Internal Address: Jongro-gu, Seol 110-110  
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If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s):  
12/451,437 Filed: November 9, 2009

B. Patent No.(s):

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5. Name and address of party to whom correspondence concerning document should be mailed:

Internal Address and Phone Number:

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666 Third Ave., 10<sup>th</sup> Floor  
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# ASSIGNMENT

This is an Assignment of the following rights, title and interest:

- ☐ United States of America rights, title and interest in the invention  
☒ United States Patent Application Serial No. 12/451,437

Title of the Invention:

**A METHOD OF PREPARING MULTICOMPONENT BISMUTH MOLYBDATE CATALYSTS WITH CONTROLLING PH AND A METHOD OF PREPARING 1,3-BUTADIENE USING THEREOF**

Inventors (assignors):

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Assignee:

SK Energy Co., Ltd.: 99, Seorin-dong, Jongro-gu, Seoul 110-110, Republic of Korea

Whereas, we, the above-identified Inventors, have invented certain new and useful improvements in the Invention identified above and described in the above-identified patent application(s) and/or patent(s) (hereinafter referred to as "Invention");

And, whereas we desire to assign our above-identified rights, title and interest in the Invention to the above-identified assignee;

Now, this indenture witnesseth, that for good and valuable consideration, the receipt whereof is hereby acknowledged;

We hereby assign, sell and transfer our above-identified rights, title and interest in said Invention, said applications(s) as identified above, including any divisions, continuations, and continuations-in-part thereof, and in and to any and all Letters Patent of the United States, which may be granted or have granted for said Invention, and in and to any and all reissues and reexaminations thereof, and in and to any and all priority rights, Convention rights, and other benefits accruing or to accrue to us with respect to the filing of applications for patents or securing of patents in the United States, unto said Assignee.

And we hereby authorize and request the Commissioner of Patents and Trademarks to issue any United States Letters Patent which may issue for said Invention to said Assignee, as assignee of the whole right, title and interest thereto;

And we further agree to sign and execute all necessary and lawful future documents, including applications, for filing divisions, continuations and continuations-in-part of said application for patent, and/or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid Invention, as the Assignee or its Designee(s) may from time to time require and prepare at its own expense.

Young Min Chung      09/04/2009  
 Signature: CHUNG, Young Min      Date

Tae Jin Kim      09/04/2009  
 Signature: KIM, Tae Jin      Date

Yong Seung Kim      09/07/2009  
 Signature: KIM, Yong Seung      Date

Heesoo KIM      09/04/2009  
 Signature: KIM, Hee Soo      Date

Howon Lee      09/01/2009  
 Signature: LEE, Ho Won      Date

Seong Jun Lee      09/04/2009  
 Signature: LEE, Seong Jun      Date

Seung Hoon Oh      09/07/2009  
 Signature: OH, Seung Hoon      Date

In Kyu Song      09/01/2009  
 Signature: SONG, In Kyu      Date

Ji Chul Jung      09/01/2009  
 Signature: JUNG, Ji Chul      Date

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