FORM PTO-1619A Expires 06/30/99 OMB 0551-0027		U.S. Dep Patent a	sartment of Commerce nd Trademark Office PATENT	
	OATION FORM COVER PATENTS ONLY	. On E	883Z/	
TO: The Director of the United States Patent and Trudemark Office: Please record the attached original document(s) or copy(les). Submission Type Conveyance Type				
Submission Type	Assignment [Security Agreement		
Resubmission (Non-Recordation) Document ID#	License	Change of Name		
Correction of PTO Error	Merger [Other Confirmatory	/ License	
Reel # Frame # Corrective Document	(For Use Of	<i>U.S. Government</i> ILY by U.S. Governme <u>nt A</u> genci	96)	
Reel # Frame #	1 I ———	mental File Se	cret File	
Conveying Party(ies) Mark if additional names of conveying parties attached Execution Date Month Day Year				
Name (line 1) UNIVERSITY OF MINNESOTA			05/23/1997	
Name (line 2)			Execution Date Month Day Year	
Second Party				
Name (line 2)				
No. Madditional names of receiving parties attached				
Receiving Party			If document to be recorded	
Name (line 1) U. S. Department of Energy				
Name (line 2) States, an appointment of a demestic representative is attached.				
Address (line 1) 1000 Independence Avenue, S.W.				
Address (line 2)			Assignment.)	
		20585-0162		
Address (line 3) Washington City	State/Country	Zip Code		
Domestic Representative Name and	Address Enter fo	r the first Receiving Party on	ily. ——————	
Name				
Address (line 1)		<u> </u>		
Address (line 2)				
Address (line 3)				
Address (line 4)				
FOR OFFICE USE ONLY				

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheat to be recorded, including time for reviewing the decument and gathering the data needed to complete the Cover Sheet. Ber d comments regarding this burden estimate to the U.S. Patent and Tredemark Office, Chief information officer, and gathering the data needed to complete the Cover Sheet. Ber d comments regarding this burden estimate to the U.S. Patent and Tredemark Assignment and Budget, Peperwork Reduction Project (0651-027), Washington, D.C. 20503, Washington, D.C. 20231 and to the Office of Information and Regulatory Afairs, Office of Management and Budget, Peperwork Reduction Project (0651-027), Washington, D.C. 20503, Washington, D.C. 20503 and to the Office of Information Collection Budget Package 0651-0027, Patent and Tredemark Assignment Practice. DO NOT SEND REQUIESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS See OMB Information Collection Budget Package 0651-0027, Patent and Tredemark Assignment Practice. DO NOT SEND REQUIESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS See OMB Information Collection Budget Package 0651-0027, Patent and Tredemark Assignment Practice. DO NOT SEND REQUIESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS See OMB Information Collection Budget Package 0651-0027, Patent and Tredemark Assignment Practice. DO NOT SEND REQUIESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS See OMB Information Collection Budget Package 0651-0027, Patent and Tredemark Assignment Practice. DO NOT SEND REQUIESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS See OMB Information Collection Budget Package 0651-0027, Patent and Tredemark Assignment Practice. DO NOT SEND REQUIESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS SEC OMB PACKAGE.

Mail Stop Assignment Recorded with required cover sheet to the U.S. Patent and Tredemark Assignment Practice. DO NOT SEND REQUIESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS SEC OMB PACKAGE.

FORM PTO-1619B Expires 06/30/09 OMB 0651-0027	Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT
Correspondent Name and Add	ress Area Code and Telephone Number	202-586-2805 (FAX)
Name Brenda K. Banks		
Address (line 1) U. S. Department of Energy	·	
Address (line 2) 1000 Independence Avenue	, S.W	
Address (line 3) Washington, D. C. 20585-0	162	
Address (line 4) Telephone (Voice): 202-58	6-2802	
Pages Enter the total number including any attach	er of pages of the attached conveyance docu ments.	
Application Number(s) or Pate		if additional numbers attached
Enter either the Patent Application Numb Patent Application Numb	er or the Patent Number (DO NOT ENTER BOTH number per(s) Pate	ent Number(s)
09/589,387	a new Palent Application, enter the date the patent application	cation Month Day Year
Patent Cooperation Treaty (PC Enter PCT application nu only if a U.S. Application has not been assigned.	DT) PCT PCT PCT	PCT PCT
Number of Properties Enter	the total number of properties involved.	# 1
Method of Payment:	Amount for Properties Listed (37 CFR 3.41): Enclosed Deposit Account Deposit Account Deposit Account Deposit Account Number: Authorization to charge additional fees:	#
Statement and Signature	-	
To the best of my knowled attached copy is a true cop Indicated herein. Brenda K. Banks	ge and belief, the foregoing information is tru by of the original document. Charges to depo BUNDAL FW	ue and correct and any osit account are authorized, as
Name of Person Signing	/ Signature	Date

PATENT REEL: 018163 FRAME: 0144

09/589,387

CONFIRMATORY LICENSE

(Nonprofit Organizations or Small Business Firms)

Title

CATALYTIC OXIDATIVE DEHYDROGENATION PROCESS AND

CATLAYST

Inventor(s)

Chikafumi Yokoyama, Sameer S. Bharadwaj, & Lanny D. Schmidt

Serial No.

589,387

Filing Date: January 22, 1996

Contractor

UNIVERSITY OF MINNESOTA

DOE Contract No.:

DE-FG02-88ER13878

DOE Case No.

S-88,321

Patent Rights Clause No.: DEAR 952.227-71

Foreign Applications filed in or intended to be filed at Contractor's expense in (countries): PCT application #PCT/US95/12605 filed 9/29/95. National phase not entered. Abandoned 3/97.

The Contractor, having the right to retain title to Subject Inventions as a result of Public Law 96-517, has reported the above-identified invention as a Subject Invention to DOE with its election to retain title thereto.

Accordingly, this document is confirmatory of the nonexclusive, nontransferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States, required by the Public Law and the above-identified contract, in this Subject Invention, patent application and any resulting patent, as well as any continuation, divisional, reissue, supplemental or continuation-in-part thereof, throughout the world and of all other rights acquired by the Government by the above-identified patent rights clause, a copy of which is attached hereto and incorporated by reference herein. The undersigned certifies the attached copy to be a true copy of said clause. It is understood and agreed that this license does not preclude the Government from asserting rights under the provisions of said contract or of any other agreement between the Government and the Contractor, or from asserting any other rights of the Government with respect to the above-identified Subject Invention.

The Government is hereby granted an irrevocable power to inspect and make copies of the above-identified patent application.

(Business Address)
Morrill Hall, 100 Church St. SE, Minneapolis, MN 55455
PATENT

RECORDED: 08/22/2006

REEL: 018163 FRAME: 0145