PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Sergey A. Lamansky	07/15/2010
Terry L. Smith	07/15/2010
Jun-Ying Zhang	07/15/2010
Leslie A. Todero	07/19/2010
Encai Hao	07/20/2010
Ha T. Le	07/22/2010
Ding Wang	07/07/2010
Fei Lu	09/01/2010
Shoichi Masuda	07/05/2010

RECEIVING PARTY DATA

Name:	3M INNOVATIVE PROPERTIES COMPANY
Street Address:	P.O. BOX 33427
City:	SAINT PAUL
State/Country:	MINNESOTA
Postal Code:	55133-3427

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12765014

CORRESPONDENCE DATA

Fax Number: (657)736-3733

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 651-733-1500

Email: amzontelli@mmm.com

Correspondent Name: 3M INNOVATIVE PROPERTIES COMPANY

Address Line 1: PO BOX 33427

Address Line 4: ST. PAUL, MINNESOTA 55133-3427

PATENT

REEL: 024931 FRAME: 0482

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ATTORNEY DOCKET NUMBER:	66081US002
NAME OF SUBMITTER:	Angela M. Zontelli
Total Attachments: 12	
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PATENT REEL: 024931 FRAME: 0483

ASSIGNMENT OF APPLICATION

Whereas I/we, the below named inventor(s), with residence and citizenship as indicated below, have made an invention in

	OLED LIGHT EXTRACTION FILMS HAVING INTERNAL NANOSTRUCTURES AND EXTERNAL MICROSTRUCTURES
	for which an application for a United States Patent is being filed contemporaneously herewith;
\boxtimes	for which an application for a United States Patent identified as U.S. Patent Application No. 12/765,014; was filed on April 22, 2010
	which application is identified as PCT International Patent Application No.; filed;

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, I/we have agreed to assign and transfer and do hereby assign and transfer unto the 3M INNOVATIVE PROPERTIES COMPANY, a wholly-owned subsidiary of 3M COMPANY, and a corporation of Delaware, having its principal office at Saint Paul, Minnesota, its successors and assigns, the entire right, title, and interest in and to the said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in the said invention made by me or made jointly with others (provided any such improvement is made during, or within one year after the termination of, my employment with 3M COMPANY and any of its existing or future subsidiaries), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon the said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by me/us had this assignment and transfer not been made;

I/We do further agree for myself/ourselves and for my/our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as I/we lawfully may, that may be deemed necessary by said Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries; and

REEL: 024931 FRAME: 0484

I/We do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said 3M Innovative Properties Company, as the assignee of the entire right, title, and interest therein.

In witness whereof, I/we have signed my/our name(s) on the day and year set forth below.

Given Name (first and middle [if any]): Sergey A.	Family Name or Surname: Lamansky	
Inventor's Signature:	Date:	
	7/5/2	210
Residence:	Country:	Citizenship:
Apple Valley, Minnesota	USA	Russian Federation
Witness	Witness	<u> </u>
port [[[]]] [] [] [] [] [] [] [
Given Name (first and middle [if any]): Terry L.	Family Name or Sur Smith	name:
Inventor's Signature:	Date:	
	7/15/	2010
Residence: Roseville, Minnesota	Country: // USA	Citizenship: United States of America
	<u>A.</u>	14.
Witness	Witness	
Annual Control of the		
Given Name (first and middle [if any]): Jun-Ying	Family Name or Sur Zhang	name:
Inventor's Signature:	Date: 0구//ち,	/2010
Residence: Woodbury, Minnesota	Country: USA	Citizenship: Great Britain
Witness (Witness	<u> </u>
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Given Name (first and middle [if any]):	Family Name or Sur	name:
Leslie A.	Todero	
Inventor's Signature:	Date:	
Levio I Todero	07/19/3	d/0
Residence:	Country:	Citizenship:
West Saint Paul, Minnesota	USA	United States of America
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Given Name (first and middle [if any]): Encai	Family Name or Sur Hao	name:
Inventor's Signature:	Date:	
Euch Heco	07/20/	20[0
Residence:	Country:	Citizenship:
Woodbury, Minnesota	USA	People's Republic of
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Given Name (first and middle [if any]): Ha T.	Family Name or Sur Le	name:
Inventor's Signature:	Date:	
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Residence:	Country:	Citizenship:
Saint Paul, Minnesota	USA	United States of America
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Given Name (first and middle [if any]):	Family Name or Sur	name:
Ding	Wang	
Inventor's Signature:	Date:	
Park Comment		
Residence:	Country: USA	Citizenship:
Austin, Texas	USA	People's Republic of China
		Ciliia
Witness	Witness	
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Given Name (first and middle [if any]):	Family Name or Sur	name:
Fei	Lu	
Inventor's Signature:	Date:	
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Residence:	Country:	Citizenship:
Woodbury, Minnesota	USA	People's Republic of
A.		China
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Given Name (first and middle [if any]):	Family Name or Sur	name:
Shoichi	Masuda	
Inventor's Signature:	Date:	
Residence:	Country:	Citizenship:
Tokyo, Japan	Japan	Japan
Tonyo, papan	vapan	Oapan
Witness	A. D. BA	
Williess	Witness	

ASSIGNMENT OF APPLICATION

Whereas I/we, the below named inventor(s), with residence and citizenship as indicated below, have made an invention in

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	for which an application for a United States Patent is being filed contemporaneously herewith;
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Now, therefore, for good and valuable consideration, receipt of which is acknowledged, I/we have agreed to assign and transfer and do hereby assign and transfer unto the 3M INNOVATIVE PROPERTIES COMPANY, a wholly-owned subsidiary of 3M COMPANY, and a corporation of Delaware, having its principal office at Saint Paul, Minnesota, its successors and assigns, the entire right, title, and interest in and to the said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in the said invention made by me or made jointly with others (provided any such improvement is made during, or within one year after the termination of, my employment with 3M COMPANY and any of its existing or future subsidiaries), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon the said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by me/us had this assignment and transfer not been made;

I/We do further agree for myself/ourselves and for my/our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as I/we lawfully may, that may be deemed necessary by said Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries; and

I/We do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said 3M Innovative Properties Company, as the assignee of the entire right, title, and interest therein.

In witness whereof, I/we have signed my/our name(s) on the day and year set forth below.

Given Name (first and middle [if any]): Sergey A.	Family Name of Lamansky	or Surname:
inventor's Signature:	Date:	
Residence: Apple Valley, Minnesota	Country: USA	Citizenship: Russian Federation
Witness	Witness	
Given Name (first and middle [if any]): Terry L.	Family Name o	r Surname:
Inventor's Signature:	Date:	
Residence: Roseville, Minnesota	Country: USA	Citizenship: United States of America
Witness	Witness	
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Given Name (first and middle [if any]); Jun-Ying	Family Name of Zhang	r Surname:
Inventor's Signature:	Date:	
Residence: Woodbury, Minnesota	Country: USA	Citizenship: Great Britain
Witness	Witness	

Assignment

Page 2 of 4 3M Innovative Properties Company, P. O. Box 33427, St. Paul, MN 55133-3427

Maria Blanca Maria and Salak Me	iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	
Given Name (first and middle [if any]): Leslie A.	Family Name of Todero	or Surname:
Inventor's Signature:	Date:	
Residence:	Country:	Citizenship;
West Saint Paul, Minnesota	USA .	United States of America
Witness	Witness	
(A) _ (A) _ (B)		
Given Name (first and middle [if any]): Encal	Family Name o Hao	or Surname;
Inventor's Signature:	Date:	
Residence:	Country:	Citizenship;
Woodbury, Minnesota	USA	People's Republic of China
Witness	Witness	
Given Name (first and middle [if any]): Ha T.	Family Name of Le	r Surname:
inventor's Signature:	Date;	
Residence; Saint Paul, Minnesota	Country:	Citizenship:
OBART S BUT, NING GOODS	USA	United States of America
Witness	Witness	

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Page 3 of 4 3M Innovative Properties Company, P. O. Box 33427, St. Paul, MN 55133-3427

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Given Name (first and middle [if any]): Ding	Family Name or St	ımame:
Inventor's Signature:	Wang	
inventor's signature;	Date:	m / m = 1 m
Sim Van	0.1/0,	7/20/0
Residence:	Country:	Citizenship:
Austin, Texas	USA	People's Republic of
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May Villegas	Lu fa	lul_
Witness	Witness	
A. I.		
Given Name (first and middle [if any]): Fei	Family Name or Su	mame:
Inventor's Signature:	Lu	
mreation a Oignature.	Date:	
Residence:	Country:	Citizenship:
Woodbury, Minnesota	USA	People's Republic of China
Witness	Witnace	
Witness	Witness	
Given Name (first and middle [if any]):	Family Name or Su	rname:
Given Name (first and middle [if any]): Shoichi	Family Name or Su Masuda	rname:
Given Name (first and middle [if any]):	Family Name or Su	rname:
Given Name (first and middle [if any]): Shoichi	Family Name or Su Masuda	rname:
Given Name (first and middle [if any]): Shoichi Inventor's Signature: Residence:	Family Name or Su Masuda Date:	
Given Name (first and middle [if any]): Shoichi Inventor's Signature:	Family Name or Su Masuda	Citizenship: Japan
Given Name (first and middle [if any]): Shoichi Inventor's Signature: Residence:	Family Name or Su Masuda Date: Country:	Citizenship;
Given Name (first and middle [if any]): Shoichi Inventor's Signature: Residence:	Family Name or Su Masuda Date: Country:	Citizenship;
Given Name (first and middle [if any]): Shoichi Inventor's Signature: Residence:	Family Name or Su Masuda Date: Country:	Citizenship;

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Page 4 of 4 3M Innovative Properties Company, P. O. Box 33427, St. Paul, MN 55133-3427

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Given Name (first and middle [if any]): Sergey A	Family Name or Surname: Lamansky		
Inventor's Signature:	Date:		
Residence: Apple Valley, Minnesota	Country: USA	Citizenship: Russian Federation	
Witness	Witness		
Given Name (first and middle [if any]): Terry L.	Family Name or Surname: Smith		
Inventor's Signature:	Date:		
Residence: Roseville, Minnesota	Country: USA	Citizenship: United States of America	
Witness	Witness		
Given Name (first and middle [if any]): Jun-Ying	Family Name o	or Surname:	
Inventor's Signature:	Date:		
Residence: Woodbury, Minnesota	Country: USA	Citizenship: Great Britain	
Witness	Witness		

Given Name (first and middle [if any]): Leslie A	Family Name or Surname: Todero		
Inventor's Signature:	Date:		
Residence: West Saint Paul, Minnesota	Country: USA	Citizenship: United States of America	
Witness	Witness		
Given Name (first and middle [if any]): Encal	Family Name or Surname:		
Inventor's Signature:	Date:		
Residence: Woodbury, Minnesota	Country: USA	Citizenship: People's Republic of China	
Witness	Witness		
Given Name (first and middle [if any]): Ha T.	Family Name o	r Surname:	
Inventor's Signature:	Date:		
Residence: Saint Paul, Minnesota	Country: USA	Citizenship: United States of America	
Witness	Witness		

Given Name (first and middle [if any]): Ding	Family Name or Surname: Wang	
Inventor's Signature:	Date:	
Residence: Austin, Texas	Country: USA	Citizenship: People's Republic of China
Witness	Witness	
Given Name (first and middle [if any]): Fei	Family Name or Surname: Lu	
Inventor's Signature:	Date:	
Residence: Woodbury, Minnesota	Country: USA	Citizenship: People's Republic of China
Witness	Witness	
Given Name (first and middle [if any]): Shoichi	Family Name o	r Surname:
Inventor's Signature: Anguella Aloguela	Date: フェクター S 、 シ ® / O	
Residence: Tokyo, Japan	Country: Japan	Citizenship: Japan
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