### PATENT ASSIGNMENT

## Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:		NEW ASSIGNMENT	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT	
CONVEYING PART	Y DATA	]		
Name			Execution Date	
Bruce B. Doris			03/31/2010	
Kangguo Cheng			03/31/2010	
Wilfried E. Haensch			04/07/2010	
Ali Khakifirooz			04/12/2010	
Isaac Lauer			03/31/2010	
Ghavam G. Shahidi			04/14/2010	
			IL	
Name:		International Business Machines Corporation		
Street Address:		New Orchard Road		
City:	Armonk			
State/Country:	NEW YORK			
Postal Code:	10504	10504		
PROPERTY NUMBE	ERS Total: 1			
Property Type			Number	
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Application Number CORRESPONDENC Fax Number: <i>Correspondence win</i> Phone: Email: Correspondent Nam Address Line 1:	CE DATA (401)42 <i>Il be sent via US</i> 401-427 patents ne: George 303 Tat	7-0319 <i>Mail when the fax attempt is unsu</i> 7-0853 @computer.org Sai-Halasz per Avenue	uccessful.	
Application Number CORRESPONDENC Fax Number: <i>Correspondence win</i> Phone: Email: Correspondent Nam	CE DATA (401)42 <i>Il be sent via US</i> 401-427 patents ne: George 303 Tat	7-0319 <i>Mail when the fax attempt is unsu</i> /-0853 @computer.org Sai-Halasz	uccessful.	
Application Number CORRESPONDENC Fax Number: <i>Correspondence win</i> Phone: Email: Correspondent Nam Address Line 1:	CE DATA (401)42 <i>Il be sent via US</i> 401-427 patents ne: George 303 Tat Provide	7-0319 <i>Mail when the fax attempt is unsu</i> 7-0853 @computer.org Sai-Halasz per Avenue	uccessful.	

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Whereas, the undersigned Inventor(s) has/have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") in:

#### Title of the Invention: TUNNEL FIELD EFFECT TRANSISTOR

and further identified by the IBM Docket Number provided above in the header of this Assignment, for which an application for a United States Patent was executed concurrently herewith or was filed having:

Application No.: 12/760,287

Whereas, International Business Machines Corporation, a corporation of New York having a place of business at Armonk, New York (herein referred to as "IBM"), desires to acquire, and each undersigned Inventor desires to grant to IBM, the entire worldwide right, title, and interest in and to the Invention and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned Inventor ("ASSIGNOR") hereby sells, assigns, and otherwise transfers to IBM (the "ASSIGNEE"), its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned Inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to IBM, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by IBM, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made; and each undersigned Inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in IBM, its successors, legal representatives, and assigns, whenever requested by IBM, its successors, legal representatives, or assigns.

Executed by Inventor 1 Date: 3/31/2.010 Signature: nn lard Bruce B. Doris Executed by Inventor 2 Date: 3/31/2010 Signature: Kangguo Cheng **Executed by Inventor 3** 

Date:

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## **Executed** by Inventor 4

<u>C. Khak</u> Signature:

Ali Khakifirooz

Date: 4/12,20/0

**Executed by Inventor 5** 

Signature: \_\_\_\_\_\_Isaac Lauer

Date:

**Executed** by Inventor 6

Signature: \_\_\_\_\_\_ Ghavam G. Shahidi

Date:

Page 3 of 3

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**Executed** by Inventor 3

Signature: Ulfre

Wilfried E. Haensch

Date: 04-07-10

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		Executed by Inventor 4	
Signature:	Ali Khakifirooz		Date:
		Executed by Inventor 5	
Signature:	Isaac Lauer		Date:
		Executed by Inventor 6	
Signature:	Ghavam G. Shahid	 i	Date:

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		Executed by Inventor 1	
Signature:	Bruce B. Doris		Date:
		Executed by Inventor 2	
Signature:	Kangguo Cheng		Date:
		Executed by Inventor 3	
Signature:	Wilfried E. Haens		Date:

Page 2 of 3

**Executed** by Inventor 4 Signature: Date: Ali Khakifirooz **Executed by Inventor 5** Date: 05/31/2010 Signature; Isaac Lauer **Executed** by Inventor 6 Ghavam G. Shahidi Signature: \_ Date:

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		Executed by Inventor 1	
Signature:	Bruce B. Doris		Date:
		Executed by Inventor 2	
Sígnature:	Kangguo Cheng		Date:
		Executed by Inventor 3	
Signature:	Wilfried E. Haens		Date:

#### **Executed by Inventor 4**

Signature: \_\_\_\_\_\_Ali Khakifirooz

**Executed by Inventor 5** 

Signature: \_\_\_\_\_\_\_Isaac Lauer

Executed by Inventor 6.

Signature: <u>Ukavaa</u> 4. Shah J Ghavam G. Shahidi

Date: April 14, 2 01 °

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**RECORDED: 04/14/2010** 

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