\$40,00 11843

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
James L. Hafner	08/01/2007	
Carl E. Jones	08/02/2007	
David R. Kahler	08/02/2007	
Robert A. Kubo	08/02/2007	
David F. Mannenbach	08/02/2007	
Karl A. Nielsen	08/02/2007	
James A. O'Connor	08/01/2007	
Krishnakumar R. Surugucchi	08/01/2007	

RECEIVING PARTY DATA

Name:	nternational Business Machines (IBM) Corporation	
Street Address:	New Orchard Road	
City:	Armonk	
State/Country:	NEW YORK	
Postal Code:	10504	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11843804

CORRESPONDENCE DATA

Fax Number: (303)785-8795

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

Phone: 303-403-4510

Email: dan-shifrin@comcast.net

Correspondent Name: D A Shifrin

Address Line 1: 14081 West 59th Ave
Address Line 4: Arvada, COLORADO 80004

ATTORNEY DOCKET NUMBER: TUC920070004US2

PATENT

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NAME OF SUBMITTER:	Dan Shifrin	
Total Attachments: 6		
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Whereas, we

James L. Hafner	of	San Jose	County of	<u>Santa Clara</u>	and State of	<u>CA</u>	and
Carl E. Jones	of	Tucson	County of	<u>Pima</u>	and State of	<u>AZ</u>	and
David R. Kahler	of	<u>Tucson</u>	County of	<u>Pima</u>	and State of	<u>AZ</u>	and
Robert A. Kubo	of	Tucson	County of	<u>Pima</u>	and State of	\underline{AZ}	and
David F.Mannenbach	of	Tucson	County of	<u>Pima</u>	and State of	\underline{AZ}	and
Karl. A.Nielsen	of	Tucson	County of	<u>Pima</u>	and State of	<u>AZ</u>	and
James A. O'Conner	of	<u>Ulster Park</u>	County of	<u>Ulster</u>	and State of	$\underline{\mathrm{NY}}$	and
Krishnakumar R. Surugucchi	of	Fremont	County of	<u>Alameda</u>	and State of	<u>CA</u>	
David R. Kahler Robert A. Kubo David F.Mannenbach Karl. A.Nielsen James A. O'Conner	of of of of of	Tucson Tucson Tucson Tucson Ulster Park	County of County of County of County of County of	Pima Pima Pima Pima Ulster	and State of and State of and State of and State of and State of	AZ AZ AZ AZ AZ NY	31 31

have invented certain improvements in

and executed, respectively, a United States patent application therefore on

DETECTION AND CORRECTION OF DROPPED WRITE ERRORS IN A DATA STORAGE SYSTEM

(1)	(2) 17 Aug 2007	(3) 8/2/200 ((4) 8/2/2007
(5) <u>8/2/2007</u>	(6) 2 AUG 2007	(7)	(8)

0/2/200

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504 (hereinafter called IBM), desires to acquire the entire right, title and interest in the said application and invention, and to any United States and foreign patent to be obtained therefor:

Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, I, the above named, hereby sell, assign, and transfer to IBM, its successors and assigns, the entire right, title and interest in the said application and invention therein disclosed for the United States and foreign countries, and in all foreign countries, and all rights of priority resulting from the filing of said United States application, and I request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said application to IBM, its successors and assigns; and I hereby agree that IBM may apply for foreign Letters Patent on said invention and I will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

at on		James L. Hafner
at on	TUCSON 17 Ay 2007	Carl E. Jones
at on	TUCSON1 8/2/2007	David R. Kahler REEL: 019737 FRAME: 0455

IBM DOCKET: TUC920070004US⊁ ∠ Page 2 of 2

Krishnakumakeel: 019787 FRAME: 0456

at	TUCSEN	
on	<u>\$\2\2007</u>	Robert A. Kubo
at	Tueson 8/2/2007	Sewel & Thursenbas
on	8/2/2007	David F.Mannenbach
at	Tueson	Karl A. Die
on	2 Aug 2007	Karl. A.Nielsen
at		
on		James A. O'Conner

at

on

IBM DOCKET: TUC920070004US2 Page 1 of 2

Whereas we

on

James L. HafnerofSan JoseCounty ofSanta Claraand State ofCarl E. JonesofTucsonCounty ofPimaand State ofDavid R. KahlerofTucsonCounty ofPimaand State ofRobert A. KuboofTucsonCounty ofPimaand State ofDavid F.MannenbachofTucsonCounty ofPimaand State ofKarl. A.NielsenofTucsonCounty ofPimaand State ofJames A. O'ConnerofUlster ParkCounty ofUlsterand State ofKrishnakumar R. SurugucchiofFremontCounty ofAlamedaand State ofhave invented certain improvements in	CA and AZ and AZ and AZ and AZ and NY and CA
James A. O'ConnerofUlster ParkCounty ofUlsterand State ofKrishnakumar R. SurugucchiofFremontCounty ofAlamedaand State of	<u>NY</u> and
have invented certain improvements in	
DETECTION AND CORRECTION OF DROPPED WRITE ERRORS IN A DATA STORAGE S	2VOTEM
and executed, respectively, a United States patent application therefore on	
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(5) (6) (7) (8)/(27
Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York place of business at Armonk, New York 10504 (hereinafter called IBM), desires to acquire the title and interest in the said application and invention, and to any United States and foreign probabilities obtained therefor; Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, I, the above name sell, assign, and transfer to IBM, its successors and assigns, the entire right, title and interest application and invention therein disclosed for the United States and foreign countries, and in countries, and all rights of priority resulting from the filing of said United States application, at the Commissioner of Patents to issue any Letters Patent granted upon the inventions set for application to IBM, its successors and assigns; and I hereby agree that IBM may apply for fore Patent on said invention and I will execute all papers necessary in connection with the United foreign applications when called upon to do so by IBM.	entire right patent to be ned, hereby in the said all foreign ad I reques orth in said eign Letters
at Son Toke CA James L. Harner	
on Carl E. Jones	
at PATENT	

David R. Kahler

REEL: 019737 FRAME: 0457

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IBM DOCKET: TUC920070004US2 Page 1 of 2

Whereas, we James L. Hafner Santa Clara and State of οf San Jose County of and Carl E. Jones ΟÊ Tueson County of Pima and State of and ΑZ David R. Kahler Tueson County of Pima and State of and οſ Robert A. Kubo Tueson of. County of Pima and State of and David F.Mannenbach οſ Tucson County of Pima and State of and Karl. A.Nielsen AZοĒ and State of James A. O'Connet O'Coulon Tueson County of Pima and of Ulster Park County of Ulster and State of NYand Krishnakumar R. Surugucchi of Fremont County of Alameda and State of have invented certain improvements in DETECTION AND CORRECTION OF DROPPED WRITE ERRORS IN A DATA STORAGE SYSTEM and executed, respectively, a United States patent application therefore on Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504 (hereinafter called IBM), desires to acquire the entire right, title and interest in the said application and invention, and to any United States and foreign patent to be obtained therefor: Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged. I, the above named, hereby sell, assign, and transfer to IBM, its successors and assigns, the entire right, title and interest in the said application and invention therein disclosed for the United States and foreign countries, and in all foreign countries, and all rights of priority resulting from the filing of said United States application, and I request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said application to IBM, its successors and assigns; and I hereby agree that IBM may apply for foreign Letters Patent on said invention and I will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM. άĺ James L. Hafner onat Carl E. Jones Ω

David R. Kahler

at

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m on}$

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	Robert A. Kubo
	Karl. A.Nielsen
ULSTER PARK, NY 7/31/2007	James A. O'Connet
	Krishnakungar Ratent