

## PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Dengfeng Gao</td><td>09/30/2003</td></tr><tr><td>Ihab F. ILYAS</td><td>09/30/2003</td></tr><tr><td>Eileen Tien Lin</td><td>09/30/2003</td></tr><tr><td>Guy Maring Lohman</td><td>09/30/2003</td></tr><tr><td>Jun Rao</td><td>09/30/2003</td></tr></tbody></table>	Name	Execution Date	Dengfeng Gao	09/30/2003	Ihab F. ILYAS	09/30/2003	Eileen Tien Lin	09/30/2003	Guy Maring Lohman	09/30/2003	Jun Rao	09/30/2003	
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Jun Rao	09/30/2003												
RECEIVING PARTY DATA													
Name:	International Business Machines Corporation												
Street Address:	New Orchard Road												
City:	Armonk												
State/Country:	NEW YORK												
Postal Code:	10504												
PROPERTY NUMBERS Total: 1													
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>12032838</td></tr></tbody></table>	Property Type	Number	Application Number:	12032838									
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Application Number:	12032838												
CORRESPONDENCE DATA													
Fax Number:	(703)461-7060												
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
Phone:	703-461-7060												
Email:	ram@ip-authority.com												
Correspondent Name:	IP AUTHORITY, LLC RAMRAJ SOUNDARARAJAN												
Address Line 1:	4821A Eisenhower Ave												
Address Line 4:	Alexandria, VIRGINIA 22304												
ATTORNEY DOCKET NUMBER:	ARC920030045US2												
NAME OF SUBMITTER:	Ramraj Soundararajan												

CH \$40.00 12032838

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PATENT  
REEL: 020522 FRAME: 0125

**Total Attachments: 14**

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## PATENT ASSIGNMENT

Electronic Version v07  
 Stylesheet Version v02

01/07/2004  
 800009738

SUBMISSION TYPE:	NEW ASSIGNMENT																
NATURE OF CONVEYANCE:	ASSIGNMENT OF ASSIGNOR'S INTEREST																
CONVEYING PARTY DATA																	
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<p>FAX NUMBER: 703-838-7684</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>When the customer number has been provided, the Office of Public Records will obtain the correspondence data from the official record on file at the USPTO.</p> <p>CUSTOMER NUMBER: 026381</p>																	
NAME OF PERSON SIGNING:			Ramraj Soundararajan														
DATE SIGNED:			2004-01-07														
<p>Total Attachments: 10</p> <p>source=ASSIGNCVRP3.tif</p> <p>source=ASSIGNCVRP4.tif</p> <p>source=ASSIGNCVRP5.tif</p> <p>source=ASSIGNCVRP6.tif</p> <p>source=ASSIGNCVRP7.tif</p>																	

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## ASSIGNMENT

Whereas, we,

- |     |  |                                       |
|-----|--|---------------------------------------|
| (1) | Dengfeng Gao<br>County of Pima             | of Tucson<br>and State of AZ,         |
| (2) | Ihab F. Ilyas<br>County of Tippecanoe      | of West Lafayette<br>and State of IN, |
| (3) | Eileen Tien Lin<br>County of Santa Clara   | of San Jose<br>and State of CA,       |
| (4) | Guy Maring Lohman<br>County of Santa Clara | of San Jose<br>and State of CA,       |
| (5) | Jun Rao<br>County of Santa Clara           | of San Jose<br>and State of CA,       |

have invented certain improvements in

*Estimating the Compilation Time of a Query Optimizer*


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

- (1) 9/30, 2003, (2) \_\_\_\_\_, 2003, (3) \_\_\_\_\_, 2003, (4)  
\_\_\_\_\_, 2003, (5) \_\_\_\_\_, 2003.

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 patents to be obtained therefore;

Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, we, 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 all rights of priority resulting from the filing of said United States application, and we 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 we hereby agree that IBM may apply for foreign Letters Patent on said invention and we will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

Signed and sealed:

- |     |                       |  |
|-----|-----------------------|--|
| (1) | at <u>Tucson, AZ</u>  |  |
|     | on <u>9/30</u> , 2003 | Dengfeng Gao   |

(2) at \_\_\_\_\_  
on \_\_\_\_\_, 2003 Ihab F. Ilyas

(3) at \_\_\_\_\_  
on \_\_\_\_\_, 2003 Eileen Tien Lin

(4) at \_\_\_\_\_  
on \_\_\_\_\_, 2003 Guy Maring Lohman

(5) at \_\_\_\_\_  
on \_\_\_\_\_, 2003 Jun Rao

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(1) at \_\_\_\_\_  
on \_\_\_\_\_, 2003                      Dengfeng Gao

(2) at West Lafayette, IN  
on 09/30, 2003

Ihab F. Ilyas  
Ihab F. Ilyas

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on \_\_\_\_\_, 2003

\_\_\_\_\_  
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on 9-30, 2003

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\_\_\_\_\_

Guy Maring Lohman

(5) at San Jose, CA

on Sep. 30, ~, 2003



Jun Rao