

11-05-2003

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**Mark A. Lavin**  
**Maharaj Mukherjee**  
**Dov Ramm**

**Alan E. Rosenbluth**  
**Shlomo Shlafman**

Additional names(s) of conveying party(ies)

☐ Yes ☒ No

## 3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
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Execution Date: 10/10/03, 10/19/03, 10/10/03, 10/13/03,  
 10/10/03, 10/19/03, 10/23/03, 10/19/03

## 2. Name and address of receiving party(ies):

Name: International Business Machines Corporation

Internal Address: \_\_\_\_\_

Street Address: New Orchard RoadCity: ArmonkState: NYZIP: 10504Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application number(s) or patent numbers(s):

If this document is being filed together with a new application, the execution date of the application is:

10/10/03, 10/19/03,  
 10/10/03, 10/13/03,  
 10/10/03, 10/19/03,  
 10/23/03, 10/19/03

## A. Patent Application No.(s)

## B. Patent No.(s)

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## 6. Total number of applications and patents involved:

1

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PATENT

REEL: 014649 FRAME: 0454

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For and in consideration of good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor acknowledges his/her prior and ongoing obligation to sell, assign, and transfer, and agrees to sell, assign, and transfer the entire world wide right, title and interest for the United States and all foreign countries, in and to any and all inventions and improvements conceived during and within the scope of his/her employment, and further acknowledges that he/she has sold, assigned, and transferred, and hereby sells, assigns, and transfers, unto:

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a corporation of New York, and IBM desires to acquire all right, title, and interest, in and to the certain inventions (identified below), applications, and any United States and foreign patents to be obtained therefore relating to:

Title of Invention for **IMPROVEMENT OF PERFORMANCE IN MODEL-BASED OPC ENGINE UTILIZING EFFICIENT POLYGON FINNING METHOD**

United States Patent

as set forth in United States Patent Application executed by each undersigned inventor on the date indicated by each inventor signature below, and further identified by Attorney Docket Number **FI920030109US1**;

(Select one): ☒ executed concurrently herewith or ☐ Serial No. \_\_\_\_\_ Filed on \_\_\_\_\_

for and to said United States Patent Application including any and all divisions or continuations thereof and in and to any and all Letters Patent of the United States and foreign patents and all rights of priority to be obtained therefore which may issue on any such application or for said invention therein disclosed, including any and all reissues or extensions thereof, to be held and enjoyed by, its successors, legal representatives and assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made;

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Signature: Craig M. Goffman Date: 10/10/03

Executed by Inventor 2 of 8

Signature: Emanuel Gelfman Date: 19 Oct 2003

Executed by Inventor 3 of 8

Signature: Kifah Liu Date: 10/19/2003

Executed by Inventor 4 of 8

Signature: Mark A. Levin Date: 13 OCT 2003

Executed by Inventor 5 of 8

Signature: Maharaj Mukherjee Date: 10/10/03

Executed by Inventor 6 of 8

Signature: Dov Ramm Date: October 19, 2003

Executed by Inventor 7 of 8

Signature: Alan E. Rosenbluth Date: 10/23/03

Executed by Inventor 8 of 8

Signature: Shlomo Shlafman Date: 19 Oct 2003

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