

# PATENT ASSIGNMENT

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|---|---------------------------------------|
| SUBMISSION TYPE:  | NEW ASSIGNMENT                        |
| NATURE OF CONVEYANCE:   | ASSIGNMENT                            |
| <b>CONVEYING PARTY DATA</b>   |                                       |
| Name  | Execution Date                        |
| Alireza PAKYARI   | 09/07/2006                            |
| Brian K. OGILVIE  | 09/14/2006                            |
| <b>RECEIVING PARTY DATA</b>   |                                       |
| Name:   | The MathWorks, Inc.                   |
| Street Address:   | 3 Apple Hill Drive                    |
| City:   | Natick                                |
| State/Country:  | MASSACHUSETTS                         |
| Postal Code:  | 02148                                 |
| <b>PROPERTY NUMBERS Total: 1</b>  |                                       |
| Property Type   | Number                                |
| Application Number:   | 12642095                              |
| <b>CORRESPONDENCE DATA</b>  |                                       |
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| ATTORNEY DOCKET NUMBER:   | MWS-231DV                             |
| NAME OF SUBMITTER:  | Kevin J. Canning                      |
| <p>Total Attachments: 3</p> <p>source=MWS-231DV_Assignment#page1.tif</p> <p>source=MWS-231DV_Assignment#page2.tif</p> |                                       |

CH \$40.00 12642095

**501045969**

**PATENT**  
**REEL: 023676 FRAME: 0751**



## ASSIGNMENT BY INVENTORS

WE, Alireza PAKYARI and Brian K. OGILVIE, of Lexington, Massachusetts and Holliston, Massachusetts, respectively, in consideration of One Dollar and other valuable consideration paid to us by

The MathWorks, Inc.

a Corporation of Delaware, having its principal place of business at 3 Apple Hill Drive, Natick, Massachusetts 01760, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said

The MathWorks, Inc.

its successors and assigns, the entire interest for the United States of America and all foreign countries including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in

AN ALGORITHM AND ARCHITECTURE FOR MULTI-ARGUMENT ASSOCIATIVE  
OPERATIONS THAT MINIMIZES THE NUMBER OF COMPONENTS USING A  
LATENCY OF THE COMPONENTS

described in an application

☐ Executed by us of even date herewith and about to be filed

or

☒ Application No. 11/444962, filed on May 31, 2006

in the United States Patent and Trademark Office, and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuing, reissue or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said Corporation and its successors and assigns but at its or their expense and charges, hereafter to execute all applications, amended specifications, deed or other instrument, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said corporation, with specifications and claims in such form as shall be approved by the counsel of said Corporation and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

And we do further hereby grant the attorneys/agents of Lahive & Cockfield, LLP, the power to insert on this Assignment the filing date and/or application number of said application.

A.R. Pakyari  
Alireza Pakyari

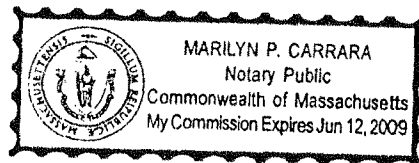
Date: 9/7/06

United States of America )  
State of Massachusetts ) ss.:  
County of Middlesex )

On this 7<sup>th</sup> day of September, 2006 before me, the  
the undersigned notary public, personally appeared Alireza Pakyari  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was MA driver's license, to be the person whose name  
is signed on the preceding or attached document in my presence.

Marilyn P. Carrara (official signature and seal of notary)

My commission expires June 12, 2009



Brian K. Ogilvie  
Brian K. Ogilvie

Date: September 14, 2006

United States of America )  
State of Massachusetts ss.:  
County of Middlesex )

On this 14<sup>th</sup> day of September, 2006 before me, the  
the undersigned notary public, personally appeared Brian K. Ogilvie  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was MA driver's license, to be the person whose name  
is signed on the preceding or attached document in my presence.

Marilyn P. Carrara (official signature and seal of notary)  
My commission expires June 12, 2009

