U.S. PTO 11/999317 12/04/2007

12-13-2007 Form PTO-1595 (Rev. 08/05) U.S. DEPARTMENT OF COMMERCE OMB No. 0651-0027 (exp. 6/30/2008) led States Patent and Trademark Office RECOF 103468170 To the Director of the U.S. Patent and Tradem. s or the new address(es) below. 1. Name of conveying party(ies): 2. Name and address of receiving party(ies) Xiaocang LIN November 30, 2007 The MathWorks, Inc. Robert O. ABERG November 30, 2007) Internal Address: Additional name(s) of conveying party(ies) attached? Street Address: 3. Nature of conveyance/Execution Date(s): 3 Apple Hill Drive Execution Date(s): In parentheses after inventor name x Assignment Merger Change of Name Security Agreement Joint Research Agreement City: Government Interest Assignment State: Massachusetts Executive Order 9424, Confirmatory License Country: United States of America 01760 Zip: Additional name(s) & address(es) Other Yes No X attached? 4. Application or patent number(s): This document is being filed together with a new application. A. Patent Application No.(s) B. Patent No.(s) This application Additional numbers attached? Yes x No 5. Name and address to whom correspondence 6. Total number of applications and 1 concerning document should be mailed: patents involved: Name: Kevin J. Canning LAHIVE & COCKFIELD, LLP 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Internal Address: Atty. Dkt.: MWS-283 Authorized to be charged by credit card Street Address: One Post Office Square Authorized to be charged to deposit account None required (government interest not affecting title) **Boston** City: 8. Payment Information MA Zip: 02109-2127 a. Credit Card State: Last 4 Numbers **Expiration Date** Phone Number: (617) 994-0732 (617) 742-4214 12-0080 Fax Number: b. Deposit Account Number Authorized User Name Kevin J. Canning Email Address: 9. Signature: December 4, 2007 ature Date Jămes M. McKenzie, Esq. - 51,146 Total number of pages including cover. sheet, attachments, and documents: Name of Person Signing 12/12/2007 MJAMA1 00000037 120080 11999317 01 FC:8021 40.00 DA Express Mail Label No. EM 066 423 574 US Dated: December 4, 2007

PATENT

REEL: 020247 FRAME: 0723

ASSIGNMENT BY INVENTORS

WE, Xiaocang LIN and Robert O. ABERG, of Wayland, Massachusetts and South Grafton, 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

OPTIMIZATION TRACING

x Executed by us of even date here	with and about to be filed
or	•
Application No., filed on	

described in an application

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.

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MWS-283

PATENT REEL: 020247 FRAME: 0724 Xiaocang Lin

Date: 11/30/07
United States of America State of
County of M. Le C./
On this 30 day of November, 2007 before me, the the undersigned notary public, personally appeared Xiao Cans Lia
(name of document signer), proved to me through satisfactory evidence of identification, which was MAChiver's / icense , to be the person whose name
is signed on the preceding or attached document in my presence.
Duant Cauaa (official signature and seal of notary)
My commission expires



Date: 30 November 2007	(Robert O. Al	berg
United States of America State of County of Middless No. 1			
On this day of November the undersigned notary public, personally appeared (name of document signer), proved to me through satisfa which was MA driver's license is signed on the preceding or attached document in my provention.		_, to be the pe	
My commission expires	ial sign	ature and seal	of notary)



RECORDED: 12/04/2007

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PATENT REEL: 020247 FRAME: 0726