

Form PTO-1595 (Rev. 07/05)
OMB No. 0651-0027 (exp. 6/30/2008)

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United States Patent and Trademark Office

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PATENTS ONLY**

05-0932 86151/6653

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)

Juergen K. Lahner
Balamurugan Balasubramanian
Randall P. Fry

Additional name(s) of conveying party(ies) attached? Yes No

2. Name and address of receiving party(ies)Name: LSI Logic Corporation

Internal Address: _____

Street Address: 1621 Barber LaneCity: MilpitasState: CACountry: U.S. Zip: 95035

Additional name(s) & address(es) attached? Yes No

3. Nature of conveyance/Execution Date(s):Execution Date(s) 10/3/2005; 10/4/2005

- Assignment Merger
 Security Agreement Change of Name
 Joint Research Agreement
 Government Interest Assignment
 Executive Order 9424, Confirmatory License
 Other _____

4. Application or patent number(s):

A. Patent Application No.(s)
11/244,530

This document is being filed together with a new application.
B. Patent No.(s)

Additional numbers attached? Yes No

5. Name and address to whom correspondence concerning document should be mailed:Name: LSI Logic Corporation

Internal Address: _____

Street Address: 1621 Barber Lane, MS-D-106City: MilpitasState: CA Zip: 95035Phone Number: 408-433-8708Fax Number: 408-433-7460

Email Address: _____

6. Total number of applications and patents involved: 1**7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00**

- Authorized to be charged by credit card
 Authorized to be charged to deposit account
 Enclosed
 None required (government interest not affecting title)

8. Payment Information

a. Credit Card Last 4 Numbers _____
Expiration Date _____

b. Deposit Account Number 06-1135

Authorized User Name Eric J. Whitesell**9. Signature:**

/ Eric James Whitesell /
Signature

February 13, 2006
Date

Eric J. Whitesell, Reg. No. 38,657

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

3

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

Docket No.: 05-0932
86151/6653

Patent

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/WE, the undersigned, Juergen K. Lahner, Balamurugan Balasubramanian, and Randall P. Fry do hereby sell, assign, and transfer to: LSI LOGIC CORPORATION, a corporation of Delaware, having a place of business at 1621 Barber Lane, Milpitas, California 95035, ("Assignee"), its successors, assigns, and legal representatives, the entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and improvements which are disclosed in the application for United States Letters Patent,

(x) which has been executed by the undersigned concurrently herewith,
() which was filed on _____, 20__ and assigned Serial Number _____

and is entitled: METHOD AND COMPUTER PROGRAM FOR INCREMENTAL PLACEMENT AND ROUTING WITH NESTED SHELLS and in and to said application and all divisional, continuing, substitute, renewal, reissue, and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original and reissued patents which have been or shall be issued in the United States and all foreign countries on said improvements; and in and to all rights of priority resulting from the filing of said United States application; and

Agree that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns, and representatives, all facts known to the undersigned relating to said improvements and the history thereof; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications to patents and all patents on said improvements, in said Assignee, its successors, assigns and legal representatives; and

Covenant with said Assignee, its successors, assigns and legal representatives that no assignment, grant mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Name: Juergen K. Lahner Date: 10/3/05 Witness: Ludger Jakobsterwage
Juergen K. Lahner
570 Calle Buena Vista
Morgan Hill, CA 95037
Witness: Ludger Jakobsterwage
(Printed)

Name: Balamurugan Balasubramanian Date: 10/3/05 Witness: Ludger Jakobsterwage
Balamurugan Balasubramanian
3585 Agate Drive, Apt. 109
Santa Clara, CA 95051
Witness: Ludger Jakobsterwage
(Printed)

Name: _____ Date: _____ Witness: _____
Randall P. Fry
1900 Tempo Ct.
Greenville, NC 27858
Witness: _____
(Printed)

Docket No.: 05-0932
86151/6653

Patent

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Name: _____ Date: _____ Witness: _____
Juergen K. Lahner
 570 Calle Buena Vista
 Morgan Hill, CA 95037
 Witness: _____
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Name: _____ Date: _____ Witness: _____
Balaramurugan Balasubramanian
 3585 Agate Drive, Apt. 109
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 Witness: _____
 (Printed)

Name: Randall P. Fry Date: 10/04/2005 Witness: Mollie McKeithan
Randall P. Fry
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 Witness: Mollie McKeithan
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