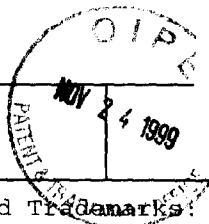


PATENT RECORDATION FORM
COVER SHEET



11-30-1999



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To the Honorable Commissioner of Patents and Trademarks: Please record the attached original document or copy thereof.

1. Name of conveying party(ies):
(1) Andrew J. Shelley
(2)
(3) *MRD 11.24.99*
Additional name(s) of conveying party(ies) attached? [] Yes [X] No

2. Name and address of receiving party(ies):
Name: LSI Logic Corporation
Internal Address: _____
Street Address: 1551 McCarthy Boulevard
City Milpitas State CA ZIP 95035
Additional name(s) & address(es) attached? [] Yes [X] No

3. Nature of Conveyance:
[X] Assignment [] Merger
[] Security Agreement
[] Change of Name [] Other _____
Execution Date: November 6, 1999

4A. Application No.(s)
09/314,660
If this document is being filed together with a new application, the execution date(s) of the application is:
Additional numbers attached? [] Yes [X] No

4B. Patent No.(s)
Additional numbers attached?
[] Yes [X] No

5. Name and address of party to whom correspondence concerning document should be mailed:
Name: Bruce Hopenfeld
Street Address: LSI LOGIC CORPORATION
1551 McCarthy Boulevard
M/S D-106
City: Milpitas State: CA ZIP 95035

6. Total number of applications and patents involved: [1]
7. Total fee (37 CFR 3.41):.....\$ 40.00
8. Method of Payment
[X] Enclosed
[X] The Commissioner is authorized to charge payment of any additional recording fees or credit any overpayment to deposit account No. 23-1123.

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9. Statement and signature.
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.
David D. Brush
Name of Person Signing
D. D. Brush Nov 18, 1999
Signature Date Total number of pages submitted: [2]

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40.00 DP

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/WE, the undersigned Andrew J. Shelley, do hereby sell, assign, and transfer to **LSI LOGIC CORPORATION**, a corporation of Delaware, having a place of business at 1551 McCarthy Boulevard, 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,

[] which has been executed by the undersigned concurrently herewith,
 [X] which was filed on May 19, 1999 and assigned Serial No. 09/314,660,

and is entitled: ELECTRONIC CIRCUITS 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 executed all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said improvements; executed all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assigned, 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 properly 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: Andrew Shelley
 (Andrew J. Shelley)

Date 6th Nov 1999

Witness: Katherine Allan

Date 6th Nov 1999

Witness
 Printed: KATHERINE ALLAN