ASSIGNMENT RECORDATION COVER SHEET -PATENTS ONLY-



Comm	uiss	ioner	of	Patents:

11-30-2004

Please record the attached document.

102891686

- Name of conveying party:
 - Nicholas K. Eib
 - **b**) Ebo H. Croffie
 - Neal P. Callan c)

	,		
2.	Name and address of receiving party: a) Name: LSI Logic Corporation Address: 1621 Barber Lane Milpitas, CA 95035		
3.	Nature of conveyance: Assignment		
	Execution Date: 10/25/04 (Eib); 11/03/04 (Croffie); 11/17/04 (Callan)		
4.	Application Number or Patent Number: Filed Herewith		
	The title of the application is: PROCESS AND APPARATUS FOR GENERATING A STRONG PHASE SHIFT OPTICAL PATTERN FOR USE IN AN OPTICAL DIRECT WRITE LITHOGRAPHY PROCESS		
5.	Please send all correspondence concerning this document to:		
	Customer Number		
	024319		
6.	Total number of applications and patents involved: 1		
7.	Total fee (37 CFR 3.41): \$40.00		
	 Enclosed. Charge to Deposit Account No. 12-2252 (Order No. 04-0028). Any additional fees are authorized to be charged to Deposit Account No. 12-2252 (Order No. 04-0028). 		
Date:	November 19, 2004 Francis T. Kalinski II Registration No. 44, 177		

Registration No. 44,177

11/30/2004 ECOOPER Total number of pages including this cover sheet, attachments and documents: 4

01 FC:8021 40.00 DA

Attorney Docket No. 04-0028/LSI1P245

(Revised 9/03)

Docket No.: 04-0028/LSI1P245

Patent

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the undersigned, Nicholas K. Eib, Ebo H. Croffie, and Neal P. Callan, 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 b	by the undersigned concurrently herewith,
()	which was filed on	, 20 and assigned Application No,

and is entitled: PROCESS AND APPARATUS FOR GENERATING A STRONG PHASE SHIFT OPTICAL PATTERN FOR USE IN AN OPTICAL DIRECT WRITE LITHOGRAPHY PROCESS

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:	Nicholas K. Eib	Date:	10/25,2004	Witness:
Name:	Ebo H. Croffie	Date:	, 2004	Witness:
Name:	Neal P Callan	Date:	, 2004	Witness:

04-0028/LSI1P245

Assignment (Revised 011995) Docket No.: 04-0028/LSI1P245

Patent

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the undersigned, Nicholas K. Eib. Ebo H. Croffie, and Neal P. Callan, 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,

	plication for United States Le	tters Patent,	Als and improvements when the	
(X) wl () wl	nich has been executed by the nich was filed on	undersigned concurrently herev _, 20 and assigned Applica	vith, tion No,	
		OR GENERATING A STRONG WRITE LITHOGRAPHY PRO		
applications for Leany of said improvement the United States	etters Patent which have been vements; and in and to all original	or shall be filed in the United S ginal and reissued patents which said improvements; and in and	renewal, reissue, and all other States and all foreign countries on h have been or shall be issued in to all rights of priority resulting	
that, when request representatives, to all divisional, con improvements; ex- Assignee, its suc- improvements and assigns or represent for said improvements	ted, without charge to, but at carry out in good faith the int ntinuing, substitute, renewal, ecute all rightful oaths, assign cessors, assigns, and represe the history thereof, and gene ntatives shall consider desirab tents and for vesting title to sa	the expense of, said Assigned, ent and purpose of this Assignmentssue, and all other patent aments, powers of attorney and centatives, all facts known to exally do everything possible will be for aiding in securing and ma	provements in its own name; and its successors, assigns and legal ment, the undersigned will execute applications on any and all said other papers; communicate to said the undersigned relating to said nich said Assignee, its successors, sintaining proper patent protection ations to patents and all patents on attives; 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: N	icholas K. Eib	Date:, 2004	Witness:	
Name: Lbo	Croffie .	Date: 11/03/04, 2004	Witness: Colin 11-3-2004	
Name:N	eal P. Callan	Date:, 2004	Witness:	

04-0028/LS11P245

Assignment (Revised 011995)

> PATENT REEL: 016018 FRAME: 0437

Docket No.: 04-0028/LSI1P245

Patent

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the undersigned, Nicholas K. Eib, Ebo H. Croffie, and Neal P. Callan, 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 Application No,
and is entitled:	PROCESS AND APPARATUS FOR GENERATING A STRONG PHASE SHIFT OPTICAL

PATTERN FOR USE IN AN OPTICAL DIRECT WRITE LITHOGRAPHY PROCESS

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:		Date;	, 2004	Witness:
	Nicholas K. Eib			
Name:	Ebo H. Croffie	Date:	, 2004	Witness:
1		.1		1 014
Name:	Neal P. Callan	v Date: 1//19	2004	Witness: free 8 Colle

PATENT RECORDED: 11/19/2004 REEL: 016018 FRAME: 0438