Expless Mail Label No.: EV 292 561 906 US

RECORDATION

P

12-17-2003

FORM PTO-1595 U.S. (Rev. 6-93) OMB No. 0651-0011 (exp. 4/94)



PARTMENT OF COMMERCE **Patent and Trademark Office**

To the Commissione	r for Patents : Pk	102620470 trie attached original docum	ents or copy thereof.	٤, _
1. Name of conveying party(ies): Hilal ESSEDDINE François DUPONT Additional name(s) of conveying party(ies) attached? [] Yes [X] No 3. Nature of conveyance:		Name and address Name: Internal Address	ess of receiving party(ies) STMicroelectronics, S.A	03917 U.S.P. 10/72968
[X] Assignment [] Merger [] Security Agreement [] Change of Name [] Other		Street Address: Additional name(s) & addr	29, Boulevard Romain R 92120 Montrouge, FRAN esses(es) attached? [] Yes [X] No	
Execution Date: Novem	ber 20, 2003			
4. Application number(s) or patent number(s): 107 29682				
If this document is being filed together with a new application, the execution date of the application is November 20,				
2003 A. Patent Application No.(s)		B. Patent No.(s)		
Additional numbers attached? [] Yes [X] No				
5. Name and address of party to whom correspondence Concerning document should be mailed: Name: James H. Morris Address: Wolf, Greenfield & Sacks, P.C. Federal Reserve Plaza 600 Atlantic Avenue Boston, MA 02210		6. Total number of applications and patents involved: [1]		
		7. Total fee (37 CFR 3.41) \$ 40.00		
		[X] Enclosed		
		[] Authorized to be charged to deposit account		
		The Commissioner is authorized to charge any deficiencies in the enclosed payment to:		
		8. Deposit Account No: 23/2825		
DO NOT USE THIS SPACE				
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. 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.				
James H. Morris	Amer		December 5, 2003	}
Name of Person Signing	Signati	ure	Date	
Total number of pages including cover sheet, attachments, and document: [2]				

Mail documents to be recorded with required cover sheet information to (modify as appropriate): **Mail Stop Patent Application**

Director - U.S. Patent and Trademark Office (when filed separately from a new application) Commissioner of Patents (when filed with a new application) PO Box 1450, Alexandria, VA 22313-1450

12/10/2003 WABRHAM1 00000068 10729682

02 FC:8021

40.00 OP

PATENT REEL: 014783 FRAME: 0129

ASSIGNMENT

In consideration of the premises and other good and valuable consideration in hand paid, the receipt and sufficiency of which is hereby acknowledged, the undersigned, EZZEDDINE Hilal (4) (2) DUPONT François (5) (3) (6) who have made a certain new and useful invention, hereby sell, assign and transfer unto STMicroelectronics SA 29, Boulevard Romain Rolland 92120 MONTROUGE, FRANCE its successors and assign (hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100 in the invention entitled DIRECTIONAL COUPLER (a) for which an application for United States Letters Patent was filed on ____; or _____, and identified by United States Serial for which an application for United States Letters Patent was executed on and the undersigned hereby authorize and request the United States and the undersigned hereby authorize and request the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefor and any and all extensions, divisions, reissues, substitutes, renewals or continuations thereof, and the right to all benefits under the International Convention for the Protection of Industrial Property to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned agree that the attorneys of record in said application shall hereafter act on behalf of said record in said application shall hereafter act on behalf of said ASSIGNEE; AND the undersigned hereby agree to transfer a like interest, and to render all necessary assistance in making application for and obtaining original, divisional, reissued or extended Letters Patent of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements, and applications for patent based thereon, growing out of or related to the said invention; and to execute any papers by the said ASSIGNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred. SIGNED on the dates indicated aside our signatures: INVENTORS DATE SIGNED EZZEDDINE Hilal Name: DUPONT François 2) Name: 3) Name: 4) Name: 5) Name: 6) Name:

RECORDED: 12/05/2003

PATENT REEL: 014783 FRAME: 0130