Attorney's Docket No. S1022/8599 \mathbf{R} 04-16-2002 FORM PTO-159 PARTMENT OF COMMERCE (Rev. 6-93) it and Trademark Office OMB No. 0651-0011 (exp. 4/94) 102056536 To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): 2. Name and address of receiving party(ies) William Bryan Barnes Name: STMicroelectronics Limited Internal Address: Additional name(s) of conveying party(ies) attached? [] Yes [X] No 1000 Aztec West, Almondsbury Street Address: 3. Nature of conveyance: Bristol BS12 4SQ, United Kingdom [X] Assignment [] Merger [] Security Agreement [] Change of Name Other Execution Date: February 8, 2001 Additional name(s) & addresses(es) attached? [] Yes [X] No 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is 09/743782 A. Patent Application No.(s) B. Patent No.(s) 09/743,782 Additional numbers attached? [] Yes [X] No 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: [1] Concerning document should be mailed: 7. Total fee (37 CFR 3.41)....\$ 40.00 James H. Morris Name: Address: WOLF, GREENFIELD & SACKS, P.C. [X] Enclosed Federal Reserve Plaza 600 Atlantic Avenue Authorized to be charged to deposit account Boston, MA 02210 The Commissioner is authorized to charge: 3/07/2002 NNGUYEN 00000071 09743782 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.

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks, Box Assignments

Washington, D.C. 20231

Total number of pages including cover sheet, attachments, and document: [2]

Signature

James H. Morris

Name of Person Signing

February 14, 2002

Date

ASSIGNMENT

In consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned William Bryan Barnes, hereby

Sell, assign and transfer to STMicroelectronics Limited, a corporation having a place of business at 1000 Aztec West, Almondsbury, Bristol BS12 4SQ, United Kingdom, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, the entire right, title and interest for the United States and all foreign countries, in and to any and all inventions which are disclosed in the application for United States Letters Patent filed on January 10, 2001 as serial No. 09/743,782 and entitled MEMORY CIRCUIT, 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 inventions; 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 inventions including the right to apply for patent rights in each foreign country and all rights to priority.

Agree that said Assignee may apply for and receive Letters Patent for said inventions in its own name; and when requested, without charge to but at the expense of said Assignee, agree to carry out in good faith the intent and purpose of this assignment by executing all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to said Assignee all facts known to me relating to said inventions and the history thereof, and generally by doing everything possible which said Assignee shall consider desirable for aiding in securing and maintaining proper patent protection for said inventions and for vesting title to said inventions and all applications for patents and all patents on said inventions, in said Assignee.

Hereby request the Honorable Commissioner of Patents and Trademarks to issue said Letters Patent to said Assignee.

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

The undersigned hereby grant(s) the firm of Wolf, Greenfield & Sacks, P.C., of 600 Atlantic Avenue, Boston, Massachusetts 02210 the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent office for recordation of this document.

Dated: 8 feb 2001 Signature William Bryan Barnes

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RECORDED: 02/27/2002

PATENT REEL: 012780 FRAME: 0960