08-19-1998

To the Assistant Commissioner of Patents: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):
   James Nolan Hardage, Jr.
   MRO 8.12.98

2. Name and address of receiving party(ies):
   Motorola, Inc.
   1303 E. Algonquin Road
   Third Floor
   Schaumburg, Illinois 60196

3. Nature of conveyance:
   X Assignment
   Execution Date: July 17, 1998

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
   A. Patent Application No.(s)
   B. Patent No.(s)

   Serial No. 09/108,157; Filed 6/30/98

5. Name and address of party to whom correspondence concerning document should be mailed:
   Anthony V.S. England
   IBM Corporation
   Intellectual Property Law
   Internal Zip 4054
   11400 Burnet Road
   Austin, TX 78758
   (512) 838-6640

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41) $ 40.00
   X Authorized to be charged to deposit account

8. Deposit IBM Corporation account number:
   09-0447

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.
   Marty Bower
   Name of Person Signing
   For Felsman, Bradley, Gunter & Dillon
   Signature Date
   Total number of pages including cover sheet: 3

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01 F02501 40.00 CH

PATENT
REEL: 9383 FRAME: 0855
ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, James Nolan Hardage, Jr., of Kyle, Texas, have sold, assigned and transferred, and do hereby sell, assign and transfer unto MOTOROLA, INC., a corporation of the State of Delaware, having its principal office in Schaumburg, State of Illinois, United States of America, and its successors, assigns, and legal representatives, the entire right, title and interest for the United States of America in and to certain inventions relating to improvements in DATA PROCESSING SYSTEM AND METHOD FOR MAINTAINING TRANSLATION LOOKASIDE BUFFER (TLB) COHERENCY WITHOUT ENFORCING COMPLETE INSTRUCTION SERIALIZATION (Attorney Docket No. HQ9-97-017), described, illustrated and claimed in an application for Letters Patent of the United States of America executed by me of even date herewith, together with my entire right, title and interest in and to said application, and in and to Letters Patent which may be issued upon said application, and upon any division, extension, continuation, or reissue thereof.

I hereby also sell, assign and transfer unto MOTOROLA, INC., the entire right, title and interest in and to said invention and in and to applications for Letters Patent therefor in all countries foreign to the United States of America, including all rights under any and all international conventions and treaties in respect of said inventions and said applications for Letters Patent in foreign countries, and I further authorize MOTOROLA, INC. to apply for Letters Patent in foreign countries directly in its own name, and to claim the priority of the filing date of said application for Letters Patent of the United States of America under the provisions of any and all international conventions and treaties.

I hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America to issue Letters Patent upon the aforesaid application, division, extension, continuation or reissue, to MOTOROLA, INC., for the sole use and behoof of MOTOROLA, INC., its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted, the same as they would have been held and enjoyed by me had this assignment not been made, and I hereby authorize and request the equivalent authorities in foreign countries to issue the patents of their respective countries to MOTOROLA, INC.

I agree that, when requested, I will, without charge to MOTOROLA, INC., but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing and maintaining patents for said inventions in any and all countries and for vesting title thereto in MOTOROLA, INC., its successors, assigns and legal representatives or nominees.

1
I covenant with MOTOROLA, INC., its successors, assigns and legal representatives, that the interest and property hereby conveyed is free from all prior assignment, grant, mortgage, license or other encumbrance.

James Nolan Hardage, Jr. 7/17/99

STATE OF TEXAS
COUNTY OF TRAVIS

I, Lupe Juarez, a Notary Public in and for the County and State aforesaid, do hereby certify that James Nolan Hardage, Jr., whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and notarial seal this 17th day of

Lupe Juarez
Notary Public, State of Texas
My Commission Expires Nov. 14, 2000

Lupe Juarez
My commission expires on 11-14-2000

SEAL

RECORDED: 08/12/1998
REEL: 9383 FRAME: 0857