U.S. DEPARTMENT OF COMMERCE FORM **PTO-1595** (Rev. 10/02) OMD No. 0651-0011 (exp. 6/30/2005 Patent and Trademark Office 102826856 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): Lei Shao; Sumit Roy; Sumeet Sandhu Name: Intel Corporation internal Address: Additional name(s) of conveying party(ies) attached? No ☐ Yes Street Address: 2200 Mission College Boulevard 3. Nature of Conveyance: ☐ Merger ★ Assignment City: Santa Clara State: CA Zip: 95052 ☐ Security Agreement ☐ Change of Name □ Other Country: USA Execution Date: 7/28/04 & 8/17/04 Additional name(s)& address(es) attached? X No Yes 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) 10/788657 Additional numbers attached? ■ No □ Yes 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: concerning document should be mailed: Name: Blakely, Sokoloff, Taylor & Zafman LLP 7. Total Fee (37 CFR 3.41).....\$ 40.00 Enclosed Internal Address: Authorized to be charged to deposit account Street Address: 12400 Wilshire Boulevard 7th Floor 8. Deposit Account Number: 02-2666 City: Los Angeles State: CA 90025 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief, the foregoing is true and correct and any attached copy is a true copy of the original document Paul A. Mendonsa August 23, 2004 Name of Person Signing Date

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P.O. Box 1450 Alexandria, VA 22313-1450

Docket No. 42P16330X

Attorney's Docket No.: 42P16330X

ASSIGNMENT

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned:

Lei Shao; Sumit Roy; Sumeet Sandhu

hereby sell, assign, and transfer to:

Intel Corporation

a Corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, Santa Clara, California 95052 USA ("Assignee"), and 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 that are disclosed in the application for the United States patent filed on February 27, 2004, and assigned Application No. 10/788657 and is entitled:

AN APPARATUS AND ASSOCIATED METHODS TO INTRODUCE DIVERSITY IN A MULTICARRIER CHANNEL

and in and to said application and all design, utility, divisional, continuing, continuation-in-part, substitute, renewal, reissue, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said inventions and improvements; and in and to all original and reissued patents that have been or shall be issued in the United States and all foreign countries on said inventions and improvements; and in and to all rights of priority from the filing of said United States applications;

agree that said Assignee may apply for and receive a patent or patents for said inventions and 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 design, utility, divisional, continuing, continuation-in-part, substitute, renewal, reissue, and all other patent applications on any and all said inventions and improvements; execute all rightful oaths, assignments, power of attorney, and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions and improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions and improvements and for vesting title to said inventions and improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

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PATENT REEL: 015733 FRAME: 0230 covenant with said Assigne; its su-ressors, 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.

Each Inventor: Please Sign and Date Re 10x:

Date 07/18/25 94 Name: Lei Shao

Lei Shao

Date

Name: Sumit Roy

Date

Name: Sumeet Sandhu

Date

Name:

Assignment Document Return Address: BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP 12400 Wilshire Boulevard, 7th Floor Los Angeles, CA 90025 Telephone: (503) 439-8778

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PATENT REEL: 015733 FRAME: 0231 coverant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, because, 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.

Fuch Inventor: Please Sign and Date Below:

Date 08 /17 /2004 Date	Name: Lei Shao Name: Sumit Roy
Date	Name: Sumeet Sandhu
Date	Name:
Date	Name;
Date	Name:
Date	Name:
Date	Name:

BLAKLEY, SOKOLOFF, TAYLOR & ZMMAN LLP 12400 Wilshire Boulevard, 7th Floor Los Angeles, CA 90025 Talankanary (504) 430 8778

Assignment Document Return Address:

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Date	Name: Lei Shao
Date 7/28/04	Name: Sumit Roy Name: Sumeet Sandhu
Date	Name:
Date	Name:
Date	Name:
Date	Name;
Date	Name:

BCARLLY, SOKOLOFF, TAYLOF & ZAFMAN LLP 12400 Wilshire Boulevard, 7th Floor Los Angeles, CA 90025 Telephone: (503) 439-8778

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