FORMETICA 1588  (Note 1501) perp. 4499   To the Honorable Commission of Patents   103017338   To the Honorable Commission of Patents   10301738   To the						
To the Honorable Commission of Patents  103017338 , original documents or copy thereof.  103017338 , original documents.  103017338 , original documents.  104016698: 3140188		MP10-1595 G/01/05 REC	06-08-2	2005	HEET	
To the Honorable Commission of Patents 103017338 .original documents or copy thereof.  1. Name of conveying party(les): Shou jun Wang  Additional name(s) of conveying party(les) attached? □ Yes ■ No  3. Nature of conveyance:		No. 0651-0011 (exp. 4/94)				
1. Name of conveying party(ies): Shou'jun Wang  Additional name(s) of conveying party(ies) attached?   Yes  No  Nature of conveyance: Street Address:   101 Innovation Drive     Street Address:   101 Innovation Drive     Street Address:   101 Innovation Drive     City:   San Jose						
Additional name(s) of conveying party(ies) attached?   Yes   No      Nature of conveyance:   Street Address:   101   Innovation   Drive		To the Honorable Commission of Patents	103017	338	original do ،	cuments or copy thereof.
Additional name(s) of conveying party(les) attached?	1.	Name of conveying party(ies):	2.	Name and add	dress of rec	eiving party(ies)
Additional name(s) of conveying party(ies) attached?  Street Address:  101 Innovation Drive    Street Address:  101 Innovation Drive		Shoujun Wang		Name: Alte	ra Corp	oration 55
Additional name(s) of conveying party(ies) attached?  \[ \text{Yes} \] No  3. Nature of conveyance:  34 Assignment  \[ \] Merger  \[ \] Street Address:  \[ \] 101 Innovation Drive  Execution Date(s):  \[ \] 524/05					_	
Street Address: 101 Innovation Drive  Assignment				internal Addres	s:	87 89
Additional name(s) & address(es) attached?   Yes   No    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:   5/24/05     A Patent Application No.(s)   B. Patent No.(s)     A Patent Application No.(s)   B. Patent No.(s)     A Patent Application No.(s)   B. Patent No.(s)     Additional numbers attached?   Yes   No    Additional numbers attached?   Yes	Α	dditional name(s) of conveying party(ies) attached? $\Box$	Yes 🗷 No			<u> </u>
Additional name(s) & address(es) attached?   Yes   No    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:   5/24/05     A Patent Application No.(s)   B. Patent No.(s)     A Patent Application No.(s)   B. Patent No.(s)     A Patent Application No.(s)   B. Patent No.(s)     Additional numbers attached?   Yes   No    Additional numbers attached?   Yes				***		<b>~</b>
City: San Jose State: CA ZIP: 95134    City: San Jose   State: CA ZIP: 95134   Additional name(s) & address(es) attached?   Ves No   Name and address of party to whom correspondence concerning document should be mailed:   Additional name(s) & address(es) attached?   Ves No   Name and address of party to whom correspondence concerning document should be mailed:   Additional name(s) & address(es) attached?   Ves No   Name and address(es) attached?   Ves No   Name and address(es) attached?   Ves No   Name and address(es) attached?   Ves No   No   Name and address(es) attached?   Ves No   No   No   No   Additional name(s) & address(es) attached?   Ves No   No   No   No   Additional name(s) & address(es) attached?   Ves No   No   No   No   Additional name(s) & address(es) attached?   Ves No   No   No   No   Additional name(s) & address(es) attached?   Ves No   No   Additional name(s) & address(es) attached?   Ves No   No   No   No   Additional name(s) & address(es) attached?   Ves No   No   No   Additional name(s) & address(es) attached?   Ves No   No   Additional name(s) & address(es) attached?   Ves No   No   No   Additional name(s) & address(es) attached?   Ves No   No   No   Additional name(s) & address(es) attached?   Ves No   No   No   Additional name(s) & address(es) attached?   Ves No   No   No   Additional name(s) & address(es) attached?   Ves No   No   Additional name(s) & address(es) attached?   Ves No   No   Additional name(s) & addresses   No   No   Additional name(s) & add	3.	Nature of conveyance:		Street Address:	101 In	novation Drive
Execution Date(s): 5/24/05  Additional name(s) & address(es) attached? □ Yes No  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: 5/24/05  A. Patent Application No.(s)  Additional numbers attached? □ Yes No  Additional numbers attached? □ Yes No  B. Patent No.(s)  Additional numbers attached? □ Yes No  Additional numbers attached? □ Yes No  Formal Address of party to whom correspondence concerning document should be mailed:  Name: FISH & NEAVE IP GROUP ROPES & GRAY LLP Internal Address: Evelyn C. Mak  Evelyn C. Mak  Deposit account No. 06-1075, order No. 000174_0368  □ Enclosed  Deficiency authorized to be charged to deposit account number: 06-1075  (Attach duplicate copy of this page if paying by deposit account)  PO 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.  Evelyn C. Mak  Name of Person  Signature  Date						
Execution Date(s): 5/24/05  Additional name(s) & address(es) attached? □ Yes No  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: 5/24/05  A. Patent Application No.(s)  Additional numbers attached? □ Yes No  Additional numbers attached? □ Yes No  B. Patent No.(s)  Additional numbers attached? □ Yes No  Additional numbers attached? □ Yes No  Formal Address of party to whom correspondence concerning document should be mailed:  Name: FISH & NEAVE IP GROUP ROPES & GRAY LLP Internal Address: Evelyn C. Mak  Evelyn C. Mak  Deposit account No. 06-1075, order No. 000174_0368  □ Enclosed  Deficiency authorized to be charged to deposit account number: 06-1075  (Attach duplicate copy of this page if paying by deposit account)  PO 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.  Evelyn C. Mak  Name of Person  Signature  Date		☐ Security Agreement ☐ Change of Name				
Additional name(s) & address(es) attached? □ Yes 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: 5/24/05  A. Patent Application No.(s)  B. Patent No.(s)  Additional numbers attached? □ Yes No  5. Name and address of party to whom correspondence concerning document should be mailed:  Name: FISH & NEAVE IP GROUP ROPES & GRAY LLP Internal Address: Evelyn C. Mak  Internal Address: Evelyn C. Mak  Street Address: 1251 Avenue of the Americas City: New York State: NY INDEPT 10020-1105  NAME YOR 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.  Evelyn C. Mak  Name of Person  Additional name(s) & address(es) attached? □ Yes No  B. Patent No.(s)  6. Total number of applications and patents involved: 1  7. Total fee (37 CFR 3.41) of \$40.00 authorized to be charged to Deposit Account No. 06-1075, Order No. 090174.0368  □ Enclosed  8. Deposit account number: 06-1075  (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 information is true and correct and any attached copy is a true copy of the original document.  Evelyn C. Mak  Name of Person  Signature  Date				City: <u>San</u> C	Jose	State: <u>CA</u> ZIP: <u>95134</u>
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: 5/24/05  A. Patent Application No.(s)  B. Patent No.(s)  Additional numbers attached?  Yes No  Name and address of party to whom correspondence concerning document should be mailed:  Name: FISH & NEAVE IP GROUP ROPES & GRAY LLP Internal Address: Evelyn C. Mak  Street Address: Evelyn C. Mak  City: New York State: NY ZIP: 10020-1105  MARCITE 10020-1105  MOVING EDUDEK 00000089 061075 11142961  PO 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.  Evelyn C. Mak  Name C. Max  June 1, 2005  Name of Person  Signature  Date	_	<del></del>	<del></del>	Additional serve	-\ 0	and the short of t
A. Patent Application No.(s)  Additional numbers attached?	Exe	cution Date(s): <u>5/24/05</u>		Additional name(s	s) & address(e	es) attached? 🔲 Yes 🖷 No
A. Patent Application No.(s)  Additional numbers attached?  \[ \text{ Yes } \] No  5. Name and address of party to whom correspondence concerning document should be mailed:  Name:  \[ \text{FISH & NEAVE IP GROUP} \] ROPES & GRAY LLP Internal Address:  \[ \text{Evelyn C. Mak} \]  Street Address:  \[ \text{Evelyn C. Mak} \]  Street Address:  \[ \text{1251 Avenue of the Americas} \] City:  \[ \text{New York} \] State:  \[ \text{NY} \] 2TP:  \[ \text{10020-1105} \]  Additional numbers attached?  \[ \text{Yes } \] No  6. Total number of applications and patents involved:  \[ \text{1} \]  7. Total fee (37 CFR 3.41) of \$\frac{40.00}{40.00} \] authorized to be charged to Deposit Account No. \[ \frac{06-1075}{06-1075}, \] Order No. \[ \frac{000174.0368}{000174.0368} \]  Benciesed  8. Deposit account number:  \[ \text{06-1075} \]  (Attach duplicate copy of this page if paying by deposit account)  1 Ft:8021  \[ \text{40.00 No Not USE THIS SPACE} \]  9. Statement and signature.  \[ \text{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.  Evelyn C. Mak  \[ \text{June C. Mak} \]  Name of Person  \[ \text{Signature} \]  Date	4.	Application number(s) or patent number(s):				
A. Patent Application No.(s)  Additional numbers attached?  \[ \text{ Yes } \] No  5. Name and address of party to whom correspondence concerning document should be mailed:  Name:  \[ \text{FISH & NEAVE IP GROUP} \] ROPES & GRAY LLP Internal Address:  \[ \text{Evelyn C. Mak} \]  Street Address:  \[ \text{Evelyn C. Mak} \]  Street Address:  \[ \text{1251 Avenue of the Americas} \] City:  \[ \text{New York} \] State:  \[ \text{NY} \] 2TP:  \[ \text{10020-1105} \]  Additional numbers attached?  \[ \text{Yes } \] No  6. Total number of applications and patents involved:  \[ \text{1} \]  7. Total fee (37 CFR 3.41) of \$\frac{40.00}{40.00} \] authorized to be charged to Deposit Account No. \[ \frac{06-1075}{06-1075}, \] Order No. \[ \frac{000174.0368}{000174.0368} \]  Benciesed  8. Deposit account number:  \[ \text{06-1075} \]  (Attach duplicate copy of this page if paying by deposit account)  1 Ft:8021  \[ \text{40.00 No Not USE THIS SPACE} \]  9. Statement and signature.  \[ \text{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.  Evelyn C. Mak  \[ \text{June C. Mak} \]  Name of Person  \[ \text{Signature} \]  Date		If this document is being filed together with a new	application, the exe	ecution date of the a	application is	: 5/24/05
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Name: FISH & NEAVE IP GROUP ROPES & GRAY LLP Internal Address: Evelyn C. Mak  Street Address: 1251 Avenue of the Americas City: New York State: NY ZIP: 10020-1105  6/00/2005 EDDDFE 0000029 061075 11142961  1 FC:8021  DO NOT USE THIS SPACE  1 Total fee (37 CFR 3.41) of \$40.00 authorized to be charged to Deposit Account No. 06-1075, Order No. 000174.0368  Deficiency authorized to be charged to deposit account number: 06-1075  (Attach duplicate copy of this page if paying by deposit account)  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.  Evelyn C. Mak Name of Person  5 june 1, 2005 Date	5.	· · · · · · · · · · · · · · · · · · ·			annlications	and natents involved:
Internal Address: Evelyn C. Mak  Street Address: 1251 Avenue of the Americas City: New York State: NY ZIP: 10020-1105  6/08/2005 ECOOPER 0000029 061075 11142961  I FC:8021 40.00 MA  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.  Evelyn C. Mak Name of Person  to Deposit Account No. 06-1075, Order No. 000174.0368  Deficiency authorized to be charged to deposit account  (Attach duplicate copy of this page if paying by deposit account)  (Attach duplicate copy of this page if paying by deposit account)  (Attach duplicate copy of this page if paying by deposit account)  (Attach duplicate copy of this page if paying by deposit account)  (Attach duplicate copy of this page if paying by deposit account)  (Attach duplicate copy of this page if paying by deposit account)  (Attach duplicate copy of this page if paying by deposit account)  (Attach duplicate copy of this page if paying by deposit account)  (Attach duplicate copy of this page if paying by deposit account)  (Attach duplicate copy of this page if paying by deposit account)  (Attach duplicate copy of this page if paying by deposit account)  (Attach duplicate copy of this page if paying by deposit account)				1		
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Internal Address: Evelyn C. Mak  Street Address: 1251 Avenue of the Americas City: New York State: NY ZIP: 10020-1105  6/08/2005 ECOUPEN 0000029 061075 11142961  PO 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.  Evelyn C. Mak Name of Person  O00174.0368  DEnclosed  8. Deposit account number: 06-1075  (Attach duplicate copy of this page if paying by deposit account)  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.  Evelyn C. Mak Name of Person  Signature  Date			OUP 7.	Total fee (37 CF	R 3.41) of \$	40.00 authorized to be charged
Street Address: 1251 Avenue of the Americas City: New York State: NY ZIP: 10020-1105  6/08/2005 ECOOPEN 0000029 061075 11142961  Account New York State: NY 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.  Evelyn C. Mak Sulph C. Mak June 1, 2005 Name of Person Signature Date			. Mak	000174.0368	<u> </u>	1075, Order No.
Street Address: 1251 Avenue of the Americas City: New York State: NY 2IP: 10020-1105  6/08/2005 ECOOPER 0000029 061075 11142961  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.  Evelyn C. Mak Name of Person  Signature  account  8. Deposit account number: 06-1075  (Attach duplicate copy of this page if paying by deposit account)  To the best of my knowledge and belief, the foregoing information is true and correct original document.  Evelyn C. Mak Signature  June 1, 2005 Date				☐ Enclosed		
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City: New York State: NY 06-1075  6/08/2005 ECOOPEN 00000029 061075 11142961  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.  Evelyn C. Mak  Evelyn C. Mak  Signature  8. Deposit account number: 06-1075  (Attach duplicate copy of this page if paying by deposit account)  Figure 1000-1075  (Attach duplicate copy of this page if paying by deposit account)  Evelyn C. Mak  Signature  June 1, 2005  Date		Street Address: 1251 Avenue o	f the		inonzea lo l	be charged to deposit
2IP: 10020-1105  6/08/2005 ECOOPEN 00000029 061075 11142961  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.  Evelyn C. Mak  Name of Person  Do Not Use This space  106-1075  (Attach duplicate copy of this page if paying by deposit account)  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.  Evelyn C. Mak  Signature  June 1, 2005  Date			8.	Deposit account	number:	
Action duplicate copy of this page if paying by deposit account)  FC:8021  ONOT 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.  Evelyn C. Mak  Signature  June 1, 2005  Date			<u>NY</u>			
deposit account)  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.  Evelyn C. Mak  Signature  June 1, 2005  Date	6/08/			(Attach duplie	cate copy o	of this page if paying by
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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.  Evelyn C. Mak  Signature  June 1, 2005  Date	9.	Statement and signature.				
Evelyn C. Mak  Signature  Evelyn C. Mak  June 1, 2005  Date		To the best of my knowledge and be	elief, the fo	regoing infor	mation i	s true and correct
Name of Person Signature Date		and any attached copy is a true co	opy of the or	iginal docume	ent.	
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PATENT: EV619637144US

**REEL: 016649 FRAME: 0380** 

## ASSIGNMENT

Whereas I, Shoujun Wang, residing at 39 Nortoba Crescent, Kanata, Ontario, Canada K2T 1G9, have made an invention in:

## BUILT-IN AT-SPEED BIT ERROR RATIO TESTER

and am about to make application for United States Letters

Patent therefor, the same having been executed by me on even

date herewith; and

WHEREAS, ALTERA CORPORATION, a corporation organized and existing under the laws of Delaware and having an office and place of business at 101 Innovation Drive, San Jose, California 95134-1941 is desirous of acquiring the entire interest in said invention, said United States patent application and in any Letters Patent which may issue thereon;

NOW, THEREFORE, be it known that for and in consideration of the sum of One Dollar (\$1.00) to me paid, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I do hereby sell, assign and transfer unto the said ALTERA CORPORATION, its successors, assigns and legal representatives, all right, title and interest in and to said invention and any improvements thereon for all countries of the world, and in and to said United States patent application, including any continuations and divisions thereof, and any substitute applications therefor, and any patents which may issue thereon, and any reissues of the same, and including the right to claim priority under the International Convention based on said patent application; and all right, title and

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interest in and to every patent application filed or to be filed on said invention in any other country, including renewals, revivals, continuations and divisions thereof, and any substitute applications therefor, and any and all patents which may issue thereon, and any reissues and extensions of the same; and I hereby authorize and request competent authorities to grant and issue any and all patents on said invention to the said ALTERA CORPORATION, as the assignee of the entire interest therein; and I further agree to execute upon request of the assignee such additional documents, if any, as are necessary and proper to secure patent protection on said invention throughout all countries of the world, and to otherwise give full effect to and perfect the rights of the assignee under this Assignment.

IN TESTIMONY WHEREOF, I have hereunto signed my name and affixed my seal on the date indicated hereinafter.

Manyl, many

RECORDED: 06/01/2005

Shoutun Wang

PATENT REEL: 016649 FRAME: 0382