1. Name of conveying party:       2. Name and address of receiving party:         Aaron Ree Hawking & 15 0 y June 14, 2004 Date of Execution       2. Name and address of receiving party:         Aaron Ree Hawking & 15 0 y June 14, 2004 Date of Execution       Name: Brigham Young University         Second Assignor       Date of Execution         Third Assignor       Date of Execution         Fourth Assignor       Date of Execution         Fourth Assignor       Date of Execution         Full Assignor       Date of Execution         Full Assignor       Date of Execution         Sixth Assignor       Date of Execution         Sixth Assignor       Date of Execution         Additional name(s) of conveying party(set) stached?       YES ⊠ NO         4. Identification of Application number(s), patent number(s) OR date of execution of application to which assignment refers:         Application Nos.:       Date of Execution         Additional name(s) of conveying party(set) stached?       YES ⊠ NO         4. Identification of Application number(s), patent number(s) OR date of execution of application to which assignment refers:         Application Nos.:       Date of Party to whom correspondence concerning documents should be mailed:         Name: Michael D. Stein       6. Total number of applications and patents involved: 1         Name of Perasosting information is true and corregin and sy	To The Honorable Commiss	ioner of Paulus and 102774	361 Trease record the attached original documents or copy thereof.
Fifth Assignor       Date of Execution       License Agreement       Security Agreement         Sixth Assignor       Date of Execution       Other:       Other:         Sixth Assignor       Date of Execution       Other:       Other:         Additional name(s) of conveying party(ies) attached?       YES 🖾 NO       Other:       Other:         4. Identification of Application number(s), patent number(s) OR date of execution of application to which assignment refers:       Date application was signed by the first named executing inventor         June 7, 2004       [Fill-in this date only if assignment is filed together with a new application)       June 7, 2004         5. Name and address of party to whom correspondence concerning documents should be mailed:       6. Total number of applications and patents involved: 1         Name: Michael D. Stein       MOODCOCK WASHBURN LLP       Enclosed         One Liberty Place - 46th Floor       Philadelphia, Pennsylvania 19103-7301       Statement and signature.         DO NOT USE THIS SPACE       9. Statement and signature.       DO NOT USE THIS SPACE         9. Statement and signature.       Mature of Preson Signing/Reg. No.       Signature       Date	1. Name of conveying party Aaron Roe Hawkins 6.12 First Assignor Second Assignor Third Assignor	Date of Execution Date of Execution	2. Name and address of receiving party:         Name: Brigham Young University         Street Address:         City: Provo         State: Utah         ZIP: 84602         Additional name(s) & address attached? □ YES ⊠ NO         3. Nature of Conveyance (check only one):
Additional name(s) of conveying party(ies) attached? □ YES ⊠ NO         4. Identification of Application number(s), patent number(s) OR date of execution of application to which assignment refers:         Application Nos.:       Patent Nos.:         ID8668475       Patent Nos.:         S. Name and address of party to whom correspondence concerning documents should be mailed:       Date applications and patents involved: 1         Name: Michael D. Stein       6. Total number of applications and patents involved: 1         Name: Michael D. Stein       7. Total fcc (37 CFR 3.41):         WOODCOCK WASHBURN LLP       6. Total number of applications and patents involved: 1         7. Total fcc (37 CFR 3.41):       \$40.00         □Do NOT USE THIS SPACE       9. Statement and signature.         7. Statement and signature.       DO NOT USE THIS SPACE         9. Statement and signature.       DO NOT USE THIS SPACE         9. Statement and signature.       6. IDCTO Y         7. Signature       Date	Fifth Assignor	Date of Execution	License Agreement Security Agreement
Application Nos.:       Patent Nos.:       Date application was signed by the first named executing inventor         June 7, 2004       (Fill-in this date only if assignment is filed together with a new application)         5. Name and address of party to whom correspondence concerning documents should be mailed:       6. Total number of applications and patents involved: 1         Name: Michael D. Stein       7. Total fee (37 CFR 3.41):       \$40.00         WOODCOCK WASHBURN LLP       7. Total fee (37 CFR 3.41):       \$40.00         One Liberty Place - 46th Floor       Philadelphia, Pennsylvania 19103-7301       215-568-3100         215-568-3100       8. Please charge any deficiency or credit any overpayment to Deposit Account Number 23-3050         B. 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.         Michael D. Stein / 34,734       Mather 24-3050	-		
concerning documents should be mailed:       6. Total number of applications and patents involved: 1         Name: Michael D. Stein       7. Total fee (37 CFR 3.41):       \$40.00         WOODCOCK WASHBURN LLP       □ Enclosed       □ Authorized to be charged to Deposit Account Number 23-3050         215-568-3100       8. Please charge any deficiency or credit any overpayment to Deposit Account Number 23-3050         Box 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.         Michael D. Stein / 34,734         Name of Person Signing/Reg. No.	Application Nos.:	Patent Nos.:	Date application was signed by the first named executing inventor June 7, 2004 (Fill-in this date only if assignment is filed
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. <u>Michael D. Stein / 34,734</u> Name of Person Signing/Reg. No. Signature Date	concerning documents should be mailed: Name: Michael D. Stein WOODCOCK WASHBURN LLP One Liberty Place - 46th Floor Philadelphia, Pennsylvania 19103-7301		<ul> <li>7. Total fee (37 CFR 3.41): \$40.00</li> <li>Enclosed</li> <li>Authorized to be charged to Deposit Account Number 23-3050</li> <li>8. Please charge any deficiency or credit any overpayment to</li> </ul>
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. <u>Michael D. Stein / 34,734</u> Name of Person Signing/Reg. No. Signature Date	<b></b>	DO NOT	USE THIS SPACE
Mail documents to be recorded with required cover sheet information to:		e and belief, the foregoing inform	

#### DOCKET NO.: UCSC-0003

### ASSIGNMENT

WHEREAS, I, Aaron Roe Hawkins, hereinafter referred to as the assignor, residing at 4115 North 190 West, Provo, Utah 84604, am a joint inventor with Holger Schmidt of certain inventions or improvements for which we have made application for Letters Patent of the United States filed herewith and listing the above named persons as inventors entitled APPARATUS FOR OPTICAL MEASUREMENTS ON LOW-INDEX NON-SOLID MATERIALS BASED ON ARROW WAVEGUIDES; and

WHEREAS, Brigham Young University, hereinafter referred to as the assignee, of Provo, Utah 84602, a corporation of Utah, is desirous of acquiring my entire right, title and interest in and to the said inventions or improvements and in and to the said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in any and all countries:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, and intending to be legally bound hereby, I, the said assignor, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, to said assignee, my entire right, title and interest in and to said inventions or improvements and said application and any and all continuations, divisions and renewals of and substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States and any and all other countries, and any re-issue or re-issues or extension or extensions of said Letters Patent, including the full right to sue for and collect damages for past violations of provisional rights having arisen from any publication of said application or any continuations, divisions, or renewals of or substitutes for said application. I further assign to and authorize said assignce to file in my name applications for Letters Patent in all countries, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by me had this assignment, sale and transfer not been made.

AND I hereby covenant that I have full right to convey my entire interest herein assigned, and that I have not executed and will not execute any agreement in conflict herewith, and I further covenant and agree that I will each time request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent to said assignee, its successors, assigns, nominees or legal representatives, and I agree to communicate to said assignee, or to its nominee all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisional, continuing, reissue and foreign applications, to make all rightful oaths, and generally to do everything possible to aid said assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in any and all countries.

Page 1 of 1

## DOCKET NO.: UCSC-0003

## PATENT One Joint Inventor Assigning Their Rights Only (NewApplication)

AND I hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents of applications as aforesaid, to issue to said assignee, as assignee of my entire right, title and interest, any and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

Executed this  $\frac{14}{14}$  day of June, 2004...

al-kunkin

Aaron Roe Hawkins

Page 2 of 2

# PATENT REEL: 015481 FRAME: 0137

**RECORDED: 06/15/2004**