FORM PTO-1595 ment of Commer		06-10-2002
1. Name of conveying party(ies): The University of British Columbia (b - 3 - 0	1430	RDATION ment of Commer 1 Trademark Offi
1. Name of conveying party(ies): The University of British Columbia 3. Nature of Conveying party(ies) attached? Yes No. X 3. Nature of Conveyance: X Assignment Merger Vancouver, British Columbia, Security Agreement Change of Name Other Execution Date: February 6, 2001 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 Additional numbers attached? Yes X No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: C.A. Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, Canada KOK 2CO (Attach duplicate copy of this page if paying by deposit account)		marks. Ple 102116642 marks or copy thereof.
The University of British Columbia Gamma	1. Name of conveying party(ies):	3 2002 2. Name and address of receiving party(ies):
Additional name(s) of conveying party(ies) attached? Yes No. X 15th floor, The Grosvenor Building 3. Nature of Conveyance: X Assignment Merger Security Agreement Change of Name Other Execution Date: February 6, 2001 Additional name(s) & address(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: A. Patent Application No.(s B. Patent No.(s) 4,807,952 Additional numbers attached? Yes X No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: C.A.Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) \$ 40.00 X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada KOK 2CO (Attach duplicate copy of this page if paying by deposit account)	TT TT I II OT III TO	6/
Additional name(s) of conveying party(ies) attached? Yes No. X 15th floor, The Grosvenor Building 3. Nature of Conveyance: X Assignment Merger Security Agreement Change of Name Other Execution Date: February 6, 2001 Additional name(s) & address(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: A. Patent Application No.(s B. Patent No.(s) 4,807,952 Additional numbers attached? Yes X No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: C.A. Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) \$ 40.00 X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada KOK 2CO (Attach duplicate copy of this page if paying by deposit account)	1 2 2 2 7	* Fraser Milner Casgrain
3. Nature of Conveyance: X Assignment Merger Security Agreement Change of Name Other Execution Date: February 6, 2001 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 Additional numbers attached? Yes X No Additional numbers attached? Yes X No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: C.A. Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) S House and Address: Box 59, Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada V6E 4H8 Additional number(s) address(s) attached? Yes X No Total number of applications and patents involved: 1 Canada Count number: 18-2150 Canada Kok 2CO (Attach duplicate copy of this page if paying by deposit account)	Additional name(s) of conveying party(ies) attached? Yes	No X 15 th floor The Grosvenor Building
X Assignment Security Agreement Other Execution Date: February 6, 2001 Additional name(s) & address(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: A. Patent Application No.(s B. Patent No.(s) 4,807,952 Additional numbers attached? Yes X No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: C.A.Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) 4 0.00 X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada KOK 2CO (Attach duplicate copy of this page if paying by deposit account)		
Security Agreement Change of Name Other Execution Date: February 6, 2001 Additional name(s) & address(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: A. Patent Application No.(s B. Patent No.(s) 4,807,952 Additional numbers attached? Yes X No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: C.A.Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) \$ 40.00 X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada KOK 2CO (Attach duplicate copy of this page if paying by deposit account)	ř	1
Other Execution Date: February 6, 2001 Additional name(s) & address(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: A. Patent Application No.(s B. Patent No.(s) 4,807,952 Additional numbers attached? Yes X No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: C.A.Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) \$ 40.00 X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada K0K 2C0 (Attach duplicate copy of this page if paying by deposit account)		
Execution Date: February 6, 2001 Additional name(s) & address(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: A. Patent Application No.(s B. Patent No.(s) 4,807,952 Additional numbers attached? Yes X No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: C.A.Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) \$ 40.00 X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada K0K 2C0 (Attach duplicate copy of this page if paying by deposit account)	, 5	Name 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Additional name(s) & address(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: A. Patent Application No.(s Additional numbers attached? Yes X No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: C.A.Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) \$ 40.00 X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada KOK 2CO (Attach duplicate copy of this page if paying by deposit account)		
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) 4,807,952 Additional numbers attached? Yes X No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: C.A.Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) \$ 40.00 X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada KOK 2CO (Attach duplicate copy of this page if paying by deposit account)	Execution Date: February 6, 2001	
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 Additional numbers attached? Yes X No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: C.A.Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) \$ 40.00 X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada K0K 2C0 (Attach duplicate copy of this page if paying by deposit account)		
A. Patent Application No.(s A. Patent Application No.(s Additional numbers attached? Additional numbers attached? Yes X No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: C.A.Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada KOK 2CO (Attach duplicate copy of this page if paying by deposit account)	A Application number(s) 1	Additional name(s) & address(cs) attached? Yes X No
A. Patent Application No.(s Additional numbers attached? Yes X No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: C.A.Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada KOK 2CO (Attach duplicate copy of this page if paying by deposit account)	••	the grounting data of the anglication in
Additional numbers attached? Yes X No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: C.A.Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) \$ 40.00 X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada K0K 2C0 (Attach duplicate copy of this page if paying by deposit account)	it this tocalitest is being fried together with a new applicable	, the execution date of the application is:
Additional numbers attached? Yes X No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: C.A.Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) \$ 40.00 X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada KOK 2CO (Attach duplicate copy of this page if paying by deposit account)	A. Patent Application No.(s	B. Patent No.(s) 4 807 952
5. Name and address of party to whom correspondence concerning document should be mailed: Name: C.A.Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) \$ 40.00 X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada K0K 2C0 (Attach duplicate copy of this page if paying by deposit account)		
5. Name and address of party to whom correspondence concerning document should be mailed: Name: C.A.Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) \$ 40.00 X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada K0K 2C0 (Attach duplicate copy of this page if paying by deposit account)		Additional numbers at all 30
concerning document should be mailed: Name: C.A.Rowley Internal Address: Box 59, 7. Total fee (37 CFR 3.41) \$ 40.00 X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada K0K 2C0 (Attach duplicate copy of this page if paying by deposit account)	5 Name and address of party to whom corresponden	
Internal Address: Box 59, 7. Total fee (37 CFR 3.41) \$ 40.00 X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada K0K 2C0 (Attach duplicate copy of this page if paying by deposit account)	concerning document should be mailed:	o. Total number of applications and patents involved: I
X Enclosed (American Express) Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada KOK 2CO (Attach duplicate copy of this page if paying by deposit account)	Name: C.A.Rowley	
Authorized to be changed to deposit account Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada K0K 2C0 (Attach duplicate copy of this page if paying by deposit account)	Internal Address: Box 59,	7. Total fee (37 CFR 3.41) \$ 40.00
Street Address: 51 Riverside Parkway, Frankford, Ontario, 8. Deposit account number: 18-2150 Canada K0K 2C0 (Attach duplicate copy of this page if paying by deposit account)		X Enclosed (American Express)
Frankford, Ontario, 8. Deposit account number: 18-2150 Canada KOK 2CO (Attach duplicate copy of this page if paying by deposit account)		Authorized to be changed to deposit account
Canada KOK 2CO (Attach duplicate copy of this page if paying by deposit account)	Street Address: 51 Riverside Parkway,	
	Frankford, Ontario,	8. Deposit account number: 18-2150
DO NOT USE THIS SPACE	Canada K0K 2C0	(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 fore of the original document.	oing information is true and correct and any attached copy is a true copy
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy	, .	
	C.A.Rowley	1 20
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.	Name of Person Signing	Signature Date Date
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.		Total number of pages comprising cover sheet: 2
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. C.A.Rowley Name of Person Signing Date Date	OMB No. 0651-0011 (exp. 4/94)	
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. C.A.Rowley Name of Person Signing Total number of pages comprising cover sheet: 2	Mail documents to be recorded with required cover sheet	Do not detach this portion
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. C.A.Rowley Name of Person Signing Total number of pages comprising cover sheet: 2 OMB No. 0651-0011 (exp. 4/94) Do not detach this portion		missioner of Patents and Trademarks
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. C.A.Rowley Name of Person Signing Total number of pages comprising cover sheet: OMB No. 0651-0011 (exp. 4/94) Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks	HELLER 00000043 4807952	
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. C.A.Rowley Name of Person Signing Total number of pages comprising cover sheet: OMB No. 0651-0011 (exp. 4/94) Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231	40.00 GP	Box Assignments Washington, D.C. 20231
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. C.A.Rowley Name of Person Signing Total number of pages comprising cover sheet: OMB No. 0651-0011 (exp. 4/94) Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Box Assignments Box Assignments Box Assignments Box Assignments	40.00 CP Public burden reporting for this sample cover sheet is es	Box Assignments Washington, D.C. 20231 mated to average about 30 minutes per document to be recorded, including time for reviewing.

PATENT REEL: 012958 FRAME: 0025

ASSIGNMENT OF PATENT

Whereas the undersigned, **The University of British Columbia**, whose post office address is 2075 Wesbrook Mall, Vancouver, British Columbia, Canada, hereinafter referred to as patentee, did obtain and is the sole owner of United States Patent No. 4,807,952 dated February 28, 1989 entitled:

VOLTAGE-INDUCED OPTICAL WAVEGUIDE MODULATOR HAVING REDUCED INTER-ELECTRODE GAP

And whereas JGKB PHONTONICS INC., hereinafter referred to as "assignee", whose registered office address is 15th floor - The Grosvenor Building, 1040 West Georgia Street, Vancouver, British Columbia V6E 4H8 is desirous of acquiring the entire right, title and interest in the same:

Now, therefore, in consideration of the sum of \$10.00, the receipt whereof is acknowledged, and other good and valuable consideration, the patentee, by these presents does hereby sell, assign and transfer unto said assignee the entire right, title and interest of the undersigned in and to the said Patent aforesaid; the same to be held and enjoyed by the said assignee for its own use and behoof, and for its legal representatives and assigns, to the full end of the term for which said Patent is granted, as fully and entirely as the same would have been held by the undersigned had this assignment and sale not been made.

Executed at VANCOLUZ, Blits link this (day of FERENN, 2001.

THE UNIVERSITY OF BRITISH COLUMBIA

Signature of Officer of assignor. Please type name & title below signature.

Bv

Angus Livingstone
Managing Director
University - Industry Liaison Office

CERTIFICATE OF EXECUTION

Before me this 6th day of February, 2001 personally appeared known to me to be the person(s) who executed the above-written assignment, and who acknowledged that such assignment was executed for the purposes therein expressed.

(Notary Seal)

Notary Public

IRIS HNIK

Barrister & Solicitor
Industry Sponsored Research
The University of British Columbia

PATENT REEL: 012958 FRAME: 0026

) TO ALL TO WHOM THESE
)
) PRESENTS MAY COME TO BE SEEN
)
) OR KNOWN

I, Charlie C. Tutt, a Notary Public by Royal authority duly appointed, residing in the City of Vancouver in the Province of British Columbia, do certify and attest that the paper writing hereto annexed is a true copy of the Assignment of Patent, whereby the University of British Columbia assigned United States Patent No. 4,807,952 to JGKB Photonics Inc., the original document having been produced and shown to me. The said copy having been compared by me with the said original document, an act whereof being requested I have granted under Notarial form and seal of office to serve and avail as occasion may require.

DATED at Vancouver, British Columbia, this 29th day of May, 2002.

A Notary Public in and for the Province of British Columbia

CHARLIE C. TUTT

Barrier & Section

FRASER MILNER DATES AND SEP

1500-1040 vers an engineer of all

vanced or an end of the Telephone before some and

6166-500729-000002-13

PATENT REEL: 012958 FRAME: 0027

RECORDED: 06/03/2002