Form PTO-1595 (Rev. 03/01) RE( 03 - 26 - 008 No. 0651-0027 (exp. 5/31/2002)	2002 ET U.S. DEPARTMENT OF CO
OMB NO. 0031-0027 (exp. 5/31/2002)	
Tab settings ⇔⇔⇔ ▼ 10203:	111/1
To the Honorable Commissioner of Faterits and Trademarks	1 1 1 4 s: Please Record the attached original documents or copy thereo
1. Name of conveying party(ies): Hui, Rongqing Allen, Christopher T. Demarest, Kenneth R.  3 - 17 - 07	Name and address of receiving party(ies)     Name: University of Kansas
Additional name of conveying party(ies) attached? ☐ Yes ☒ N	Internal Address: Office of General Counsel
Nature of conveyance:	Street Address: Strong Hall
☐ Security Agreement ☐ Change of Name ☐ Other	City: Lawrence State: KS Zip: 66
Execution Date: February 13, 2002; February 13, 2002; February 21, 2002	Additional Name(s) & address(es) attached?  Yes D
	B. Patent No.(s)
Name and address of party to whom correspondence concerning this document should be mailed:  Name: Harloy B. Bell.	6. Total number of applications and patents involved: on
Name: Harley R. Ball  Internal Address: Sprint Communications Company, L. P.	7. Total fee (37 CFR 3.41) \$ 40.00
Mailstop: MOKCMP0506	Deposit account number:
Street Address: 8140 Ward Parkway	21-0765
Oth K O'th	
City: Kansas City State: MO Zip: 64114	(Attach duplicate copy of this page if paying by deposit ad
	(Attach duplicate copy of this page if paying by deposit ac
9. Statement and signature.  To the best of my knowledge and belief, the foregoing infor is a true copy of the original document.  Eugene G. Kim	mation is tru and correct and any attached copy
9. Statement and signature.  To the best of my knowledge and belief, the foregoing infor is a true copy of the original document.  Eugene G. Kim  Name of Person Signing	mation is tru and correct and any attached copy  3/1/0

#### **ASSIGNMENT**

by

# Dr. Rongqing Hui

to the

## **University of Kansas**

to the intellectual property commonly referred to as a method of "Combating PMD-induced signal fading in SCM optical systems using polarization diversity receiver"

(Assignment ID No. ITAA020101)

WHEREAS, I, Dr. Rongqing Hui, Professor of Electrical Engineering and Computer Science Department at the University of Kansas, have invented certain new and useful technologies in the area of PMD compensation, specifically as detailed in Technical Disclosure "Combating PMD-induced signal fading in SCM optical systems using polarization diversity receiver" (#ITTD010801) dated August 8, 2001, and any and all related technology derivatives (the "Intellectual Property") for which the University of Kansas may file an application for Letters Patent, and a registration of any Trademark, Service mark, and Copyright under the laws of the United States; and

WHEREAS, the University of Kansas, a public educational institution duly organized under the laws of the State of Kansas and having its principal place of business at the Office of General Counsel, the University of Kansas, Strong Hall, Lawrence, Kansas 66045, is desirous of acquiring an interest in, to and under, said Intellectual Property, any and all applications, and any and all Letters Patent, Trademarks, Service marks, and Copyrights which may be granted or registered for or upon said Intellectual Property in the United States of America and all countries foreign thereto.

NOW, THEREFORE, to all whom it may concern be it known that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, Dr. Rongqing Hui, as one of several inventors, have assigned and transferred, and by these presents do assign and transfer unto the University of Kansas the full and exclusive right, title and interest, throughout the world, into and under the following:

- (a) the Intellectual Property;
- (b) any and all patent applications filed in connection with the Intellectual Property;
- (c) any and all refilings, divisions, and continuations of all patent applications filed in connection with the Intellectual Property;
- (d) any and all Trademarks, Service marks, and Copyrights (including without limitation all rights of the owner of copyright specified in 17 U.S.C. §106) which may issue or be registered, or rights which may be assumed from the Intellectual Property anywhere in the world;
- (e) any and all Letters Patent of the United States of America which may issue from all patent applications, refilings, divisions and continuations filed in connection with the Intellectual Property;
- (f) any and all reissues of said Letters Patent of the United States of America;

1 of 2

- (g) any and all applications for Letters Patent upon the Intellectual Property which have heretofore been filed or may hereafter be filed in any and all countries foreign to the United States of America, together with all rights to file and to claim priority in connection with all foreign-filed patent applications filed in connection with the Intellectual Property;
- (h) any and all refilings, divisions and continuations of all foreign-filed patent applications filed in connection with the Intellectual Property,

ALL of the above shall be held and enjoyed by THE UNIVERSITY OF KANSAS for its own use and behalf, and for its successors, legal representatives and assigns, to the full end of the term for which Letters Patent, Trademarks, Service marks, and Copyrights may be granted, and we do hereby authorize and request the United States Patent and Trademark Office to issue Letters Patent, and to register Trademarks and Service marks, and request the United States Copyright Office to register Copyrights, in accordance with this Agreement.

Date:	02/13/2002	Signed: \A.
	,	
STAT	E OF KANSAS	)
	TY OF DOUGLAS	)ss. )
me, <u>}</u>	On this 13 day o	of Judicia, 2002, before me personally appeared to known to be the person described in and who executed the
		ho duly acknowledged to me that he executed the same for the uses
	rposes therein set forth	
	Public	
Му Со	ommission expires:	PAMELA J. HEIMERICH
	SEAL	My Appl. Exp. 1/15/0 L
STAT	E OF KANSAS	) )ss.
COUN	ITY OF DOUGLAS	)

#### **ASSIGNMENT**

by

# Dr. Chris Allen

to the

#### University of Kansas

to the intellectual property commonly referred to as a method of "Combating PMD-induced signal fading in SCM optical systems using polarization diversity receiver"

(Assignment ID No. ITAA020102)

WHEREAS, I, Dr. Chris Allen, Professor of Electrical Engineering and Computer Science Department at the University of Kansas, have invented certain new and useful technologies in the area of PMD compensation, specifically as detailed in Technical Disclosure "Combating PMD-induced signal fading in SCM optical systems using polarization diversity receiver" (#ITTD010801) dated August 8, 2001, and any and all related technology derivatives (the "Intellectual Property") for which the University of Kansas may file an application for Letters Patent, and a registration of any Trademark, Service mark, and Copyright under the laws of the United States; and

WHEREAS, the University of Kansas, a public educational institution duly organized under the laws of the State of Kansas and having its principal place of business at the Office of General Counsel, the University of Kansas, Strong Hall, Lawrence, Kansas 66045, is desirous of acquiring an interest in, to and under, said Intellectual Property, any and all applications, and any and all Letters Patent, Trademarks, Service marks, and Copyrights which may be granted or registered for or upon said Intellectual Property in the United States of America and all countries foreign thereto.

NOW, THEREFORE, to all whom it may concern be it known that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, Dr. Chris Allen, as one of several inventors, have assigned and transferred, and by these presents do assign and transfer unto the University of Kansas the full and exclusive right, title and interest, throughout the world, into and under the following:

- (a) the Intellectual Property;
- (b) any and all patent applications filed in connection with the Intellectual Property;
- (c) any and all refilings, divisions, and continuations of all patent applications filed in connection with the Intellectual Property;
- (d) any and all Trademarks, Service marks, and Copyrights (including without limitation all rights of the owner of copyright specified in 17 U.S.C. §106) which may issue or be registered, or rights which may be assumed from the Intellectual Property anywhere in the world;
- (e) any and all Letters Patent of the United States of America which may issue from all patent applications, refilings, divisions and continuations filed in connection with the Intellectual Property;
- (f) any and all reissues of said Letters Patent of the United States of America;

COUNTY OF DOUGLAS

- (g) any and all applications for Letters Patent upon the Intellectual Property which have heretofore been filed or may hereafter be filed in any and all countries foreign to the United States of America, together with all rights to file and to claim priority in connection with all foreign-filed patent applications filed in connection with the Intellectual Property;
- (h) any and all refilings, divisions and continuations of all foreign-filed patent applications filed in connection with the Intellectual Property,

ALL of the above shall be held and enjoyed by THE UNIVERSITY OF KANSAS for its own use and behalf, and for its successors, legal representatives and assigns, to the full end of the term for which Letters Patent, Trademarks, Service marks, and Copyrights may be granted, and we do hereby authorize and request the United States Patent and Trademark Office to issue Letters Patent, and to register Trademarks and Service marks, and request the United States Copyright Office to register Copyrights, in accordance with this Agreement.

Date: 17 Feb 2	Signed: John all
STATE OF KANSAS	)
COUNTY OF DOUGLAS	)ss. )
On this 13th day me, Christopher Aller foregoing instrument, and wand purposes therein set forth	of, 2002, before me personally appeared to, known to be the person described in and who executed the who duly acknowledged to me that he executed the same for the uses n.
Damilad Heiners	
Notary Public '	
My Commission expires:	The statements of the statement of the s
	ASTARY PLUBLIC State of Kanagas PAMELA J. HEIMERICH
SEAL	My Appt. Exp. 1/15/01e
STATE OF KANSAS	)

#### **ASSIGNMENT**

by

### Dr. Ken Demarest

to the

#### University of Kansas

to the intellectual property commonly referred to as a method of "Combating PMD-induced signal fading in SCM optical systems using polarization diversity receiver"

#### (Assignment ID No. ITAA020103)

WHEREAS, I, Dr. Ken Demarest, Professor of Electrical Engineering and Computer Science Department at the University of Kansas, have invented certain new and useful technologies in the area of PMD compensation, specifically as detailed in Technical Disclosure "Combating PMD-induced signal fading in SCM optical systems using polarization diversity receiver" (#ITTD010801) dated August 8, 2001, and any and all related technology derivatives (the "Intellectual Property") for which the University of Kansas may file an application for Letters Patent, and a registration of any Trademark, Service mark, and Copyright under the laws of the United States; and

WHEREAS, the University of Kansas, a public educational institution duly organized under the laws of the State of Kansas and having its principal place of business at the Office of General Counsel, the University of Kansas, Strong Hall, Lawrence, Kansas 66045, is desirous of acquiring an interest in, to and under, said Intellectual Property, any and all applications, and any and all Letters Patent, Trademarks, Service marks, and Copyrights which may be granted or registered for or upon said Intellectual Property in the United States of America and all countries foreign thereto.

NOW, THEREFORE, to all whom it may concern be it known that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, Dr. Ken Demarest, as one of several inventors, have assigned and transferred, and by these presents do assign and transfer unto the University of Kansas the full and exclusive right, title and interest, throughout the world, into and under the following:

- (a) the Intellectual Property;
- (b) any and all patent applications filed in connection with the Intellectual Property;
- (c) any and all refilings, divisions, and continuations of all patent applications filed in connection with the Intellectual Property;
- (d) any and all Trademarks, Service marks, and Copyrights (including without limitation all rights of the owner of copyright specified in 17 U.S.C. §106) which may issue or be registered, or rights which may be assumed from the Intellectual Property anywhere in the world;
- (e) any and all Letters Patent of the United States of America which may issue from all patent applications, refilings, divisions and continuations filed in connection with the Intellectual Property;
- (f) any and all reissues of said Letters Patent of the United States of America;

COUNTY OF DOUGLAS

RECORDED: 03/12/2002

- (g) any and all applications for Letters Patent upon the Intellectual Property which have heretofore been filed or may hereafter be filed in any and all countries foreign to the United States of America, together with all rights to file and to claim priority in connection with all foreign-filed patent applications filed in connection with the Intellectual Property;
- (h) any and all refilings, divisions and continuations of all foreign-filed patent applications filed in connection with the Intellectual Property,

ALL of the above shall be held and enjoyed by THE UNIVERSITY OF KANSAS for its own use and behalf, and for its successors, legal representatives and assigns, to the full end of the term for which Letters Patent, Trademarks, Service marks, and Copyrights may be granted, and we do hereby authorize and request the United States Patent and Trademark Office to issue Letters Patent, and to register Trademarks and Service marks, and request the United States Copyright Office to register Copyrights, in accordance with this Agreement.

Date: Feb 21, 200	Signed:
STATE OF KANSAS	)
COUNTY OF DOUGLAS	)ss. )
On this\(\frac{2}{\text{ day}}\) day me, foregoing instrument, and w and purposes therein set fort \(\frac{2}{\text{Bbuy}}\) \(\frac{2}{\text{A}}\). \(\frac{2}{\text{Bbuy}}\)	
Notary Public	
My Commission expires:	
5/14/05	
SEAL	
STATE OF KANSAS	NOTARY PUBLIC State of Kansas  ROBIN M. HINMAN  No. Appl. Exp. 35/14/05

2 of 2