

**PATENT ASSIGNMENT**

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
David Haoen Chuck	04/15/2011
Jien Morris Chang	04/15/2011
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Iowa State University Research Foundation, Inc.
<b>Street Address:</b>	310 Lab of Mechanics
<b>City:</b>	Ames
<b>State/Country:</b>	IOWA
<b>Postal Code:</b>	50011-2131
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	13084704
<b>CORRESPONDENCE DATA</b>	
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<b>ATTORNEY DOCKET NUMBER:</b>	P09607US01 - I006-914
<b>NAME OF SUBMITTER:</b>	John D. Goodhue
<b>Total Attachments: 3</b> source=CHUCK_P09607US01_ASSIGN_5-2-11_JDG#page1.tif source=CHUCK_P09607US01_ASSIGN_5-2-11_JDG#page2.tif source=CHUCK_P09607US01_ASSIGN_5-2-11_JDG#page3.tif	

CH \$40.00 13084704

## ASSIGNMENT


In consideration of One Dollar and other good and valuable considerations, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to **IOWA STATE UNIVERSITY RESEARCH FOUNDATION, INC.**, an Iowa corporation, having an address of 310 Lab of Mechanics, Ames, Iowa 50011-2131, its successors and assigns the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, Serial No. 13/084,704 filed in the United States Patent and Trademark Office on the 12<sup>th</sup> day of April, 2011 entitled **BANDWIDTH RECYCLING IN NETWORKS**, and in said application and any and all other applications for United States Letters Patent, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent, applications, and in any reissue or extension thereof.

The undersigned hereby authorize and request the Commissioner of Patents to issue said Letters Patent to said **Iowa State University Research Foundation, Inc.**

For said considerations the undersigned hereby agree, upon the request, and at the expense of said assignee, its successors and assigns, to execute any and all divisional continuation and substitute applications for said invention or improvements, and any necessary oath or affidavit relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application, and for the said considerations the undersigned further agree upon the request of said assignee, its successors or assigns, in the event of any application or Letters Patent assigned herein becoming involved in interference, to cooperate to the best of the ability of the undersigned with said assignee, its successors or assigns in the matters of preparing and executing the preliminary statement and giving and producing evidence in support thereof, the undersigned hereby agreeing to perform, upon request, any and all affirmative acts to obtain said Letters Patent of the United States and vest all rights therein hereby conveying in the said assignee, its successors and assigns whereby said Letters Patent will

be held and enjoyed by the said assignee, its successors and assigns to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment and sale had not been made.

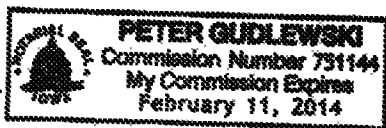
And for said considerations the undersigned hereby assign to said assignee, its successors and assigns, the entire right, title and interest in said invention or improvements for any and all foreign countries and agree upon the request of assignee, its successors and assigns to execute any and all documents that undersigned shall be requested to execute in connection with any and all applications for foreign Letters Patent therefor, including the prosecution thereof, and to execute any and all documents necessary to vest title in said foreign applications and patents in assignee.

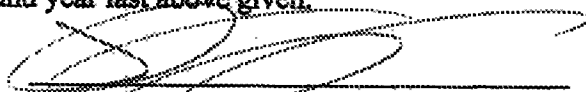
  
\_\_\_\_\_  
DAVID HOEN-CHUCK  
Hacen April 15 2011

STATE OF IOWA     )  
                                  ) ss.  
COUNTY OF Story )

On this 15<sup>th</sup> day of April, 2011, before me, a Notary Public in and for the County and State aforesaid, appeared DAVID HOEN CHUCK to me personally known to be the person whose name is subscribed to the foregoing instrument, and acknowledged that he executed said instrument as his free and voluntary act for the uses and purposes therein expressed.

Witness my hand and seal the day and year last above given.



  
\_\_\_\_\_  
Notary Public  
Commission Expires 2/11/2014

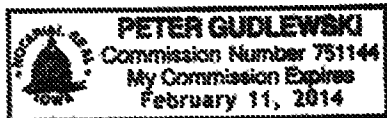
*Jien Morris Chang*

JIEN MORRIS CHANG

STATE OF IOWA )  
 ) ss.  
COUNTY OF Story )

On this 15<sup>th</sup> day of April, 2011, before me, a Notary Public in and for the County and State aforesaid, appeared JIEN MORRIS CHANG to me personally known to be the person whose name is subscribed to the foregoing instrument, and acknowledged that he executed said instrument as his free and voluntary act for the uses and purposes therein expressed.

Witness my hand and seal the day and year last above given.



*[Signature]*

Notary Public

Commission Expires 2/11/2014