I-31-92 S · Q - O \ Docket No.: 52637-0012 S · Q - O \	101716695
	s: Please record the attached original documents or copy thereto
 Name of Conveying Party(ies): Shane Michael Tonissen, Efstratios Skafidas, and Andrey Logothetis 	 2. Name and address of receiving party(ies): w Name: Bandspeed, Inc. MAY = 9 2001 Internal Address:
Additional name(s) of conveying party(ies) attached?	
3. Nature of Conveyance:	
Assignment I Merger	Street Address: 7000 West William Cannon Drive, 2220
☐ Security Agreement ☐ Change of Name	
Other	City: Austin State/Country TX ZIP:
Execution Date: February 28, 2000, February 28, 2000, and M 4, 2001	ay Additional name(s) & address(es) attached? Yes
4. Application number(s) or patent number(s):	
If the document is being filed together with a new application,	the execution date of the application is:
A. Patent Application No(s). 09/516,715 filed March 1, 2000	B. Patent No(s).
Additional num	bers attached? Yes
5. Name and address of party to whom correspondence concerni	
Document should be mailed:	
Name: HICKMAN PALERMO TRUONG & BECKER	7. Total fee (37 CFR 3.41) \$40.0
Internal Address:	Enclosed
	Authorized to be charged to deposit account
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9. Statement and signature.	
To the best of my knowledge and belief, the foregoing in	nformation is true and correct and any attached copy is a true co
of the original document.	Som
Edward A. Becker, Registration No. 37,777	Cit Clan May 4, 2001
Name and Registration No. of Person Signing	Signature Date
	Total number of pages comprising cover sheet: 1

PATENT REEL: 011784 FRAME: 0453 4

Docket No.: 52637-012

ASSIGNMENT

WHEREAS I, <u>SHANE MICHAEL TONISSEN, EFSTRATIOS SKAFIDAS and ANDREW</u> <u>LOGOTHETIS</u>, have made a certain new and useful invention as set forth in an application for United States Letters Patent, entitled <u>KALMAN FILTER BASED EOUALJZATION FOR DIGITAL MULTICARRIER</u> <u>COMMUNICATIONS SYSTEMS</u>

executed by me on the date of execution of this document, as shown below, and filed concurrently herewith;

OR

for which an application for United States Letters Patent was filed on ______, and identified by United States Serial No. ______;

AND WHEREAS, BANDSPEED, INC., a corporation of the State of Delaware and having an address of 6530 W. 6th Street, Los Angeles, California 90048, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any and all Letters Patent of the United States and foreign countries which may be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, I do hereby sell, assign, transfer and set over unto BANDSPEED, INC., its legal representatives, successors, and assigns, the entire right, title and interest in and to said invention as set forth in the above-mentioned application, including any continuations, continuations-in-part, divisions, reissues, reexaminations or extensions thereof, and in and to any and all patents of the United States and foreign countries which may be issued for said invention;

UPON SAID CONSIDERATIONS, I hereby agree with the said assignee that I will not execute any writing or do any act whatsoever conflicting with these presents, and that I will, at any time upon request, without further or additional consideration but at the expense of said assignee, execute such additional assignments and other writings and do such additional acts as said assignee may deem necessary or desirable to perfect the assignce's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, continuations, continuations-in-part, reexamined, reissued, or extended Letters Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, by giving testimony in any proceedings or transactions involving such applications or patents, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of the assigns and legal representatives of assignor and assignee;

AND I request the Commissioner of Patents and Trademarks to issue any Letters Patent of the United States which may be issued for said invention to said BANDSPEED, INC., its legal representatives, successors or assigns, as the sole owner of the entire right, title and interest in and to said patent and the invention covered thereby.

home tonisser SHANE MICHAEL TONISSEN

Date

WLOGOTHETIS

PATENT REEL: 011784 FRAME: 0454

RECORDED: 05/09/2001