FORM PTO-1595 (Rev. 6-93)		U.S. Department of
OMB No. 0651-0011 (exp. 4/94)	101826651	Patent and Trademark
To the Honorable Comm	nissioner of Patents and Trademarks: Please record the a	ittached original document or copy thereof.
1. Name of conveying party(ics):	10/nul 2. Name and	address of receiving party(ies):
Stephen F. Smith and James A	. Moore	JT-Battelle, LLC
Additional name(s) of conveying party(ies) attact	hed? Yes X No	
3. Nature of conveyance:		ress: Oak Ridge National Labo alley Road, P.O. Box 2008
Assignment	Merger	•
Security Agreement	Change of Name City: Oa	k Ridge State: TN Zip: 37831-0
Other Execution Date: 6/26/01, 6/26/01	Additional na	me(s) & address(es) attached? Yes
4. Application number(s) or registration number	(5):	
	new application, the execution date of the application	
A. Patent Application No.(s):	B. Patent N	WIN AUG 2.
09/860,841		• 4001
09/000,041		
	Additional numbers attached?	No No
 Name and address of party to whom correspon document should be mailed: 	ndence concerning 6. Total num	ber of applications and patents involved: $\underline{1}$
Name: John J. Bruckner		
FULBRIGHT & JAWOI	KSKILLP.	37 C.F.R. 3.41) \$_4
600 Congress Avenue, S	uite 2400	sed orized to be charged to deposit account
City: Austin State: Texas Zij	lease and le	icient or inadvertently omitted
·	8. Deposit ac	count number: 50-1212/10103303/JJJ
		plicate copy of this page if paying by deposit
9. Statement and signature.	DO NOT USE THIS SPACE	
C	regoinginformation is true and cor pect an d any attac	hed copy 1 a true copy of the original docum
John J. Bruckner		0
Name of Person Signing, Reg. No	0. 35,816	Signature
		ges including cover sheet, attachments and docu
	nents to be recorded with required cover shatents and Trademarks, Box Assignment	
	CERTIFICATE OF MAILING	
Liberahy actify that this correspondence i	37 C.F.R 1.8 s being deposited with the U.S. Postal Service with	aufficient postago og First Class Meil is er
addressed to: Commissioner of Patents and	d Trademarks, Box Assignment, Washington, DC 202	an the date below:
_August 22, 2001 Date	John J.	Bruckner
1 LMUELLER 00000022 0986084:	\mathcal{C}^{\prime}	

PATENT REEL: 012107 FRAME: 0211

ASSIGNMENT

WHEREAS, I (we), the below-named inventors, whose residence and post office is (are) as stated below, have invented certain new and useful improvements in

CARRIER-FREQUENCY SYNCHRONIZATION SYSTEM FOR IMPROVED AMPLITUDE MODULATION AND TELEVISION BROADCAST RECEPTION

for which an application for United States Letters Patent was executed on ______, the specification having been filed on May 17, 2001, and accorded Serial No. 09/860,841, and

WHEREAS, UT-Battelle, LLC, a limited liability company of the State of Tennessee, having an office at Oak Ridge National Laboratory, Bethel Valley Road, P.O. Box 2008, Oak Ridge, Tennessee 37831-6255, hereinafter called the ASSIGNEE, is desirous of acquiring the entire right, title and interest in the application and invention and to any Letters Patent that may be granted therefor in the United States of America and in any and all foreign countries. (Agents of ASSIGNEE are authorized to fill in blanks and make corrections in this document).

NOW THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I (we) hereby assign to ASSIGNEE the entire right, title and interest in the application and the invention, to all rights of priority thereto pursuant to the International Convention for the Protection of Industrial Property, and in any Letters Patent on the invention that may be granted in the United States of America and in any and all foreign countries, including any and all Letters Patent that are divisions, reissues, continuations, substitutions or extensions of any Letters Patent or applications therefor on the invention.

I (we) hereby authorize and request the Commissioner of the United States Patent and Trademark Office and the officials of any and all foreign countries to issue any and all of said Letters Patent, when granted, to the ASSIGNEE.

Further, I (we) hereby agree to communicate to said ASSIGNEE or its representatives any facts known to us respecting said invention, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, substitution, renewal and reissue applications, to execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, and to make all rightful oaths and generally do everything possible to aid said ASSIGNEE and its representatives to obtain and enforce proper protection for said invention in the United States of America and in any and all foreign countries.

25004267.1

1

I (we) further agree that the terms, covenants and conditions of this assignment shall inure to the benefit of ASSIGNEE, its successors, assigns, and legal representatives, and shall be binding on me (us), our heirs, legal representatives, and assigns.

Full name of first inventor: Stephen F. Smith

Inventor's Signature: _______ Highen Z. Juit Date: 6/26/2001

Residence: 1550 Pickel Road, London, TN 37774

Post Office Address:

Citizenship: USA

State of <u>Anderson</u>) County of <u>Anderson</u>)

On this $\cancel{2613}$ day of $\cancel{2001}$, 2001, before me, a Notary Public in and for the County and State aforesaid, appeared Stephen F. Smith, to me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.

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

Notary Public My Commission Expires 4/23/2005

SEAL

25004267.1