FORM PTO-1595 (Rev.6-93) (Rev.6-93) (REC) (10)	DEPARTMENT OF COMMERCE Patent and Trademark Off
ATTORNEY DOCKET NO: 232801-00164	01478332 aginal documents or copy thereo
1. Name of conveying party(ies):  Franz A. Pertl Robert P. M. Craven James E. Smith  Additional name(s) of conveying party(ies) attached?   Yes  No	2. Name and address of receiving party(ies):  Name: West Virginia University  Internal Address: Street Address: 886 Chestnut Ridge Road  City: Morgantown State: WV Zip: 26506-6845  Additional name(s) & address(es) attached? □ Yes ☒ No
3. Nature of conveyance:	3759 <del>5</del>
A. Patent Application No.(s):	B. Patent No.(s)
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Arnold B. Silverman ECKERT SEAMANS CHERIN & MELLOTT, LLC Internal address: Street Address: 600 Grant Street, 44th Floor	attached? ☐ Yes ☑ No  6. Total number of applications and patents involved: 1
City: Pittsburgh State: PA Zip: 15219	7. Total fee (37 CFR 3.41)
DO NOT US	SE THIS SPACE
000 HTHAI1 00000287 022556 09637525	August 10, 2000 Date  r sheet, attachments, and documents: 5
Commissioner of Patents and T	ith required cover sheet information to:  Trademarks, Box Patent Application on, DC 20231

PATENT REEL: 011119 FRAME: 0313

## ASSIGNMENT

WHEREAS, We, FRANZ A. PERTL, ROBERT P. M. CRAVEN, and JAMES E. SMITH, residing at 728B Weaver Street, Morgantown, WV 26505; 1131 Denver Avenue, Morgantown, WV 26505; and Route 4, Box E36, Bruceton Mills, WV 26525, respectively, have invented certain new and useful improvements in ELECTROMAGNETIC ANTENNA for which we are about to make application for Letters Patent of the United States.

AND WHEREAS **WEST VIRGINIA UNIVERSITY**, having a principal place of business at 886 Chestnut Ridge Road, Morgantown, WV 26506-6845, hereinafter called the "Assignee", is desirous of acquiring the entire right, title, and interest in and to said application and the inventions and improvements therein disclosed;

NOW, THEREFORE, in consideration of One (\$1.00) Dollar and other good and valuable consideration paid to us by said Assignee, receipt whereof we hereby acknowledge, we do hereby assign, sell, transfer, and set over unto said Assignee the entire right, title, and interest in and to said application and the inventions and improvements therein disclosed for the United States of America and all foreign countries and any Letters Patent which may issue therefor in the United States of America and all foreign countries and all divisions, reissues, continuations, renewals, and/or extensions thereof including all priority rights under the International Convention associated therewith for each country and the Union, said Assignee to have and to hold the interests herein assigned to the full ends of the terms of said Letters Patent and any and all divisions, reissues, continuations, renewals, and/or extensions thereof, respectively, as fully and entirely as the same would have been held and enjoyed by us had this assignment not been made.

The Commissioner of Patents and Trademarks is requested to issue such Letters Patent in accordance herewith. We covenant that we are the lawful owners of the said application, inventions, and improvements, that the same are unencumbered, that no license has been granted to make, use, or vend the said inventions or improvements or any of them, and that we have the full right to make this assignment.

And for the consideration aforesaid, we agree jointly and individually that we will communicate to said Assignee or the representatives thereof any facts known to us respecting said inventions and improvements, and will, upon request, but without expense to us, testify in any legal proceedings, sign all lawful papers, execute all divisional, reissue, continuation, renewal, and/or extension applications, make all rightful oaths, and generally do all other and further lawful acts, deemed necessary or expedient by said Assignee or by counsel for said Assignee, to assist or enable said Assignee to obtain and enforce full benefits from the rights and interests herein assigned. This assignment shall be binding upon our heirs, executors, administrators, and/or assigns, and shall inure to the benefit of the heirs, executors, administrators, successors, and/or assigns, as the case may be, of said Assignee.

PATENT REEL: 011119 FRAME: 0314

EXECUTED this 24th day of 3, 2000.
FRANZ A. PERTL
STATE OF WEST VIRGINIA ) ss:
COUNTY OF <u>Monongalea</u> ) ss:
Before me this 24/2, day of, 2000, personally appeared FRANZ A. PERTL, to me personally known to be the person who is described in and who executed the above instrument, and he acknowledged to me that he executed the same of his own free will for the purposes therein set forth.
OFFICIAL SEAL NOTARY PUBLIC, STATE OF WEST VIRGINIA B. JEAN KOPASKO WVU MECH. & AERO. ENGINEERING P.O. BOX 6101 MORGANTOWN, WV 26506-6101 MY COMMISSION EXPIRES MAR. 10, 2003
EXECUTED this, day of, 2000.
Klan
ROBERT P. M. CRAVEN
STATE OF WEST VIRGINIA ) , ss:
COUNTY OF Monongalia )
Before me this <u>24/h</u> day of <u>yelly</u> , 2000, personally appeared ROBERT P. M. CRAVEN, to me personally known to be the person who is described in and who executed the above instrument, and he acknowledged to me that he executed the same of his own free will for the purposes therein set forth.
B Jean Koposhr
Notary Public
(Affix Seal Here)
OFFICIAL SEAL

**PATENT REEL: 011119 FRAME: 0315**  EXECUTED this 29th day of July, 2000.

AMES E. SMITH

STATE OF WEST VIRGINIA

) ss:

COUNTY OF Monongalea

**RECORDED: 08/10/2000** 

Before me this 34th day of , 2000, personally appeared JAMES E. SMITH, to me personally known to be the person who is described in and who executed the above instrument, and he acknowledged to me that he executed the same of his own free will for the purposes therein set forth.

Notary Public

(Affix Seal Here)

OFFICIAL SEAL

NOTARY PUBLIC, STATE OF WEST VIRGINIA

B. JEAN KOPASKO

WVU MECH. & AERO. ENGINEERING
P.O. BOX 6101

MORGANTOWN, WV 26506-6101

MY COMMISSION EXPIRES MAR. 10, 2003