PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|--|
| NATURE OF CONVEYANCE: | EXECUTIVE ORDER 9424, CONFIRMATORY LICENSE |

CONVEYING PARTY DATA

| Name | Execution Date |
|---------------------------------------|----------------|
| Virginia Polytechnic Inst and St Univ | 05/22/1986 |

RECEIVING PARTY DATA

| Name: | National Institutes of Health (NIH), U.S. Dept. of Health and Human Services (DHHS), U.S. Government | |
|-------------------|--|--|
| Street Address: | NIH Division of Extramural Inventions and Technology Resources (DEITR) | |
| Internal Address: | 6705 Rockledge Drive, Suite 310, MSC 7980 | |
| City: | Bethesda | |
| State/Country: | MARYLAND | |
| Postal Code: | 20892-7980 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 06828404 |

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NAME OF SUBMITTER: Director, DEITR, NIH

Total Attachments: 1

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PATENT REEL: 021992 FRAME: 0737

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WHEREAS, Virginia Polytechnic Institute and State University, herein-(Institution)

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CERTIFICATE

Raymond D. Smoot, Jr., certify that I am the Secretary-Treasurer institution named as Licensor herein; that Raymond D. Smoot, Jr. , who signed this License on behalf of the Institution is Secretary-Treasurer of said Institution; and that said License was duly signed for and in behalf of said Institution by authority of its governing body, and is within the scope of its corporate powers. (Date)

- PATENT

REEL: 021992 FRAME: 0738

RECORDED: 12/17/2008