**PATENT ASSIGNMENT**

Electronic Version v1.1  
Stylesheet Version v1.1

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<th>SUBMISSION TYPE:</th>
<th>NEW ASSIGNMENT</th>
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<td>NATURE OF CONVEYANCE:</td>
<td>ASSIGNMENT</td>
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**CONVEYING PARTY DATA**

<table>
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<tr>
<th>Name</th>
<th>Execution Date</th>
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<tr>
<td>Kenneth W Iobst</td>
<td>01/04/1991</td>
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<tr>
<td>David R Resnick</td>
<td>12/28/1990</td>
</tr>
<tr>
<td>Kenneth R Wallgren</td>
<td>01/02/1991</td>
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**RECEIVING PARTY DATA**

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<thead>
<tr>
<th>Name</th>
<th>Institute for Defense Analyses - Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Address</td>
<td>National Security Agency</td>
</tr>
<tr>
<td>City</td>
<td>Fort George G. Meade</td>
</tr>
<tr>
<td>State/Country</td>
<td>MARYLAND</td>
</tr>
<tr>
<td>Postal Code</td>
<td>20755-6000</td>
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**PROPERTY NUMBERS Total: 1**

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<tr>
<td>Patent Number</td>
<td>5396641</td>
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**CORRESPONDENCE DATA**

Fax Number: (509)755-7252  
Correspondence will be sent via US Mail when the fax attempt is unsuccessful.  
Phone: 5097557262  
Email: kseanlinder@sbmc-law.com  
Correspondent Name: Sadler, Breen, Morasch, & Colby PS  
Address Line 1: 422 W. Riverside Ave.  
Address Line 2: Suite 424  
Address Line 4: Spokane, WASHINGTON 99201

**ATTORNEY DOCKET NUMBER:** AXES0007

**NAME OF SUBMITTER:** Michael K. Colby

Total Attachments: 6  
source=NSA (All Others)_Assignment#page1.tif
ASSIGNMENT
(From Employee to Contractor and Contractor to Government)

APPLICATION FOR (Short title of invention)
PROCESS IN MEMORY INTEGRATED CIRCUIT

INVENTOR(S)
Kenneth Iobst, David Richard Resnick, Kenneth Roy Wallgren

<table>
<thead>
<tr>
<th>SERIAL NUMBER</th>
<th>FILING DATE</th>
<th>OATH EXECUTED</th>
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CONTRACTOR
Institute for Defense Analyses

CONTRACT NUMBER
MDA904-8-4107

WHEREAS, under the terms of the above-identified contract with the United States Government the Contractor** agreed, inter alia, to grant to the Government certain rights under inventions and/or discoveries conceived or first actually reduced to practice in the performance of said contract; and

WHEREAS, the above-identified patent application discloses invention(s) within the purview of said rights agreed to be granted by the Contractor to the Government; and

WHEREAS, the Government desires that the assignment rights provided for by said contract in and to said invention(s) be confirmed; and

WHEREAS, under the employment contract, agreement or arrangement the Contractor-employer is entitled to an assignment in and to certain inventions made by the inventor(s) as part of his(her) duties as employee(s) of the Contractor; and

WHEREAS, the above identified invention(s) was/were made in the performance of the above identified contract and under such circumstances as to entitle the Government to an assignment of the entire right, title and interest in and to said invention(s) and any and all applications for Letters Patent thereon and in and to any and all Letters Patent granted on said application, subject only to a non-exclusive royalty-free license to Contractor, said license to be non-transferable except to the successor of that part of the Contractor's business to which said license is appurtenant; and

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WHEREAS, Contractor warrants that it has the right to grant such assignments by virtue of an assignment executed to Contractor and recorded in the U. S. Patent and Trademark Office as follows:

<table>
<thead>
<tr>
<th>*REEL</th>
<th>FRAME</th>
<th>RECORDING DATE</th>
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NOTE: The Contractor may delete this Whereas clause by crossing it out and initialing in the margin, if PART A, EMPLOYEE ASSIGNMENT of this form is executed. If an assignment to Contractor has been previously executed and recorded, Contractor should complete this WHEREAS clause and delete PART A.

PART A

EMPLOYEE ASSIGNMENT

NOW, THEREFORE, be it known that for and in consideration of these premises and for other good and sufficient consideration, the receipt of which is hereby acknowledge, I (we), the inventor(s), do sell, assign, and transfer to the Contractor-employer the entire right, title and interest in and to said invention(s) and patent application and in and to all Letters Patent wherever they may be granted thereon, as well as divisions, continuations, reissues, and extensions of said application and Letters Patent, the same to be held and enjoyed by the said Contractor-employer to the full end of the term or terms for which Letters Patent are or may be granted, as fully and entirely as the same would have been held or enjoyed by me (us) had this assignment not been made.


* DATA NOT SHOWN AT EXECUTION MAY BE ADDED LATER FOR BETTER IDENTIFICATION
**THE TERMS CONTRACT AND CONTRACTOR SHALL INCLUDE SUBCONTRACT AND SUBCONTRACTOR, IF APPLICABLE, WHEREVER THEY OCCUR
INVENTOR (first name, middle initial, last name)
Kenneth Lobst
ADDRESS (locality) (County) (State)
Silver Spring Montgomery Maryland
DATE Jan 1, 1991 SIGNATURE
State of Maryland }) SS
County of Prince George's }

On the above date Kenneth W. Lobst known to me to be the individual described in and who executed the foregoing instrument duly appeared before me and acknowledged to me that he executed the same as his own free act and deed.

(Signature)
Notary Public of Prince George's County
My commission expires 1.2.1992

INVENTOR (first name, middle initial, last name)
David Resnick
ADDRESS (locality) (County) (State)
Eau Claire Wisconsin
DATE Dec 29, 1990 SIGNATURE
State of Wisconsin }) SS
County of Chippewa }

On the above date known to me to be the individual described in and who executed the foregoing instrument duly appeared before me and acknowledged to me that he executed the same as his own free act and deed.

(Signature)
Notary Public of Wisconsin
My commission expires 9-91
INVENTOR (first name, middle initial, last name)

Kenneth Roy Wallgren

ADDRESS (Locality)   (County)   (State)
Columbia            Howard      Maryland

DATE: Jan 2, 1991

SIGNATURE

State of Maryland

County of Prince George's

SS

On the above date Kenneth Roy Wallgren, known to me to be the individual described in and who executed the foregoing instrument duly appeared before me and acknowledged to me that he executed the same as his own free act and deed.

(Signature)

Notary Public of Prince George's, Maryland

My commission expires November 1, 1992

(Seal)

INVENTOR (first name, middle initial, last name)

ADDRESS (Locality)   (County)   (State)

DATE

SIGNATURE

State of

County of

SS

On the above date known to me to be the individual described in and who executed the foregoing instrument duly appeared before me and acknowledged to me that he executed the same as his own free act and deed.

(Signature)

Notary Public of

My commission expires

(Seal)
PART B
CONTRACTOR ASSIGNMENT

NOW, THEREFORE, in consideration of these premises and for other good and sufficient consideration, the receipt of which is hereby acknowledged, the Contractor does hereby assign, sell and transfer to the United States Government, as represented by the Director, National Security Agency and his successors in office, the entire right, title and interest, throughout the world in and to said invention(s) and patent application and in and to any and all Letters Patent granted thereon, as well as divisions, continuations, reissues, and extensions of said application and Letters Patent, the same to be held and enjoyed by the said Government of the United States, to the full end of the term or terms for which Letters Patent are or may be granted, as fully and entirely as the same would have been held or enjoyed by the Contractor had this assignment not been made, subject only to the license, as above recited, which license extends to Contractor and to existing and future associated and affiliated companies, if any, within the corporate structure of which Contractor is a part, and which license is hereby reserved.

Signed for Contractor on

(Date) January 30, 1991

(State) Virginia

(Signature)

Ruth L. Greenstein

Typed Name

Assistant

I certify that I am the Secretary of the above-identified Corporation; that the officer who signed this instrument on behalf of the Corporation was then Vice President of the Corporation, acting by authority of its governing body and within the scope of its corporate powers.

Signed on

(Date) January 30, 1991

Typed Name

Joan P. Santora

 Typed Name

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State of Virginia
City of Alexandria

On January 30, 1991, before me appeared Ruth L. Sheeler,

and,

John P. Baxter,

(Title) Vice President

of Institute for Resource and Analysis

and a corporation of Virginia

and affixed their names to the foregoing instrument in my presence, and acknowledged the same to be their and said Corporation's free act and deed.

Seal

Notary Public

My commission expires
July 23, 1991