

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT2593267

| SUBMISSION TYPE:  | NEW ASSIGNMENT                             |               |                |                     |            |
|---|--|---------------|----------------|---------------------|------------|
| NATURE OF CONVEYANCE:   | EXECUTIVE ORDER 9424, CONFIRMATORY LICENSE |               |                |                     |            |
| CONVEYING PARTY DATA  |  |               |                |                     |            |
| <table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>B&amp;W Y-12, LLC</td> <td>10/17/2013</td> </tr> </tbody> </table>  |  | Name          | Execution Date | B&W Y-12, LLC       | 10/17/2013 |
| Name  | Execution Date                             |               |                |                     |            |
| B&W Y-12, LLC   | 10/17/2013                                 |               |                |                     |            |
| RECEIVING PARTY DATA  |  |               |                |                     |            |
| Name:   | U.S. DEPARTMENT OF ENERGY                  |               |                |                     |            |
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| State/Country:  | DISTRICT OF COLUMBIA                       |               |                |                     |            |
| Postal Code:  | 20585                                      |               |                |                     |            |
| PROPERTY NUMBERS Total: 1   |  |               |                |                     |            |
| <table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13626222</td> </tr> </tbody> </table> |  | Property Type | Number         | Application Number: | 13626222   |
| Property Type   | Number                                     |               |                |                     |            |
| Application Number:   | 13626222                                   |               |                |                     |            |
| CORRESPONDENCE DATA   |  |               |                |                     |            |
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| Date:   | 10/28/2013                                 |               |                |                     |            |
| Total Attachments: 1<br>source=2163 Confirmatory License 001#page1.tif  |  |               |                |                     |            |

CONFIRMATORY LICENSE  
LARGE BUSINESS CLASS WAIVER

**Title: Electrolytic Systems and Methods for Making Metal Halides and Refining Metals**

**Inventor(s): Justin M. Holland and David M. Cecala**

Serial No.: 13/626,222

Filing Date (U.S.): **September 25, 2012**

DOE Case No.: **S-128,004**

Contractor: **B&W Y-12, LLC**

DOE Contract No.: **DE-AC05-00OR22800**

Patent Rights Clause No.: **Article I.80 DEAR 970.5227-12 PATENT RIGHTS-MANAGEMENT AND OPERATING CONTRACTS, FOR-PROFIT CONTRACTOR, ADVANCE CLASS WAIVER (DEC 2000)**


Foreign Applications filed in or intended to be filed at Contractor's expense in (countries):  
**(None)<sup>1</sup>**

The Contractor, having the right to retain title to certain Subject Inventions as a result of the above-identified U.S. Department of Energy (DOE) Class Patent Waiver, has reported the above-identified invention as a Subject Invention to DOE with an election to retain title thereto.

Accordingly, this document is confirmatory of the nonexclusive, nontransferable, paid-up license to practice or have practice for or on behalf of the United States the Subject Invention, patent application and any resulting patent, as well as any continuation, divisional, reissue, or supplemental thereof, and of all other rights acquired by the Government by the above-identified patent rights clause, a copy of which has been previously submitted to DOE and incorporated by reference herein. If attached, the undersigned certifies the attached copy to be a true copy of said clause. It is understood and agreed that this license does not preclude the Government from asserting rights under the provisions of said contract or of any other agreement between the Government and the Contractor, or from asserting any other rights of the Government with respect to the above-identified Subject Invention.

The Government is hereby granted an irrevocable power to inspect and make copies of the above-identified patent application.

Signed, this 17<sup>th</sup> day of October, 2013

By:   
\_\_\_\_\_  
Tammy Graham, Manager  
B&W Y-12, LLC  
Office of Technology Transfer

<sup>1</sup> Note: B&W Y-12 may file a Patent Cooperation Treaty (PCT) application under the terms of its Prime Contract.