

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4260591

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	EXECUTIVE ORDER 9424, CONFIRMATORY LICENSE
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
INTERNATIONAL BUSINESS MACHINES CORPORATION	01/07/2016
<b>RECEIVING PARTY DATA</b>	
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<b>City:</b>	WASHINGTON
<b>State/Country:</b>	D.C.
<b>Postal Code:</b>	20585
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14883300
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<b>DATE SIGNED:</b>	02/06/2017
<b>Total Attachments: 1</b>	
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S-147,454

CONFIRMATORY INSTRUMENT

APPLICATION FOR: ACHIEVING BAND GAP GRADING OF CZTS AND CZTSe  
MATERIALS

INVENTORS: Talia S. Gershon, Richard A. Haight, Marinus Hopstaken, Yun Seog Lee

SERIAL NO. 14/883300	FILING DATE: October 14, 2015
CONTRACTOR: INTERNATIONAL BUSINESS MACHINES CORPORATION	CONTRACT NO. DE-EE0006334

The invention identified above is a "Subject Invention" under the Patent Rights Clause included in the above contract with:

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Signed this 7th day of January, 2016

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IBM Disclosure No.: YOR82014505  
IBM Docket No.: YOR820150689US1