PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

| SUBMISSION TYPE: | | NEW ASSIGNMENT | |
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| NATURE OF CONVEYANCE: | | ASSIGNMENT | |
| CONVEYING PART | TY DATA | | |
| | | Name | Execution Date |
| Margaret F. Lospin | uso | | 02/15/2013 |
| David M. Patrone | | | 02/20/2013 |
| David P. Silberberg | 9 | | 02/15/2013 |
| Jonathan D. Coher | ו | | 02/18/2013 |
| Ryan W. Gardner | | | 02/21/2013 |
| Laura J. Glendenni | ing | | 02/14/2013 |
| Sakunthala Harsha | avardhana | | 02/21/2013 |
| Robert T. Hider | | | 02/14/2013 |
| C. Durward McDon | nell III | | 02/18/2013 |
| Dennis S. Patrone | | | 02/18/2013 |
| Nathan S. Reller | | | 02/18/2013 |
| Benjamin R. Salaza | ar | | 02/14/2013 |
| RECEIVING PART | | pkins University | |
| Street Address: | 34th and Cha | les Street | |
| City: | Baltimore | | |
| State/Country: | MARYLAND | | |
| Postal Code: | 21218 | | |
| PROPERTY NUMB | ERS Total: 1 | | |
| Property Type | | Numb | per |
| Application Number: 1 | | 13784245 | |
| CORRESPONDEN | CE DATA | | |
| Fax Number: | 2402285 | 254 | |
| - | | Mail when the fax attempt is unsuccess | Sful. |
| Phone: | 240-228- | | |
| Email: | Elleen.So | orensen@jhuapl.edu | PATENT |
| 502252261 | | | REEL · 029917 ERAME· 0365 |

502252264

REEL: 029917 FRAME: 0365

| Correspondent Name: | Aisha Ahmad | | |
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| Address Line 1: | 11100 Johns Hopkins Raod | | |
| Address Line 2: | M/S 7-127 | | |
| Address Line 4: | Laurel, MARYL | AND 20723-6099 | |
| | | | |
| ATTORNEY DOCKET NU | MBER: | 3366-SPL | |
| NAME OF SUBMITTER: | | Aisha Ahmad | |
| | | This document serves as an Oath/Declaration (37 CFR 1.63). | |
| Total Attachments: 12 | | | |
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| source=3366-SPLCombinedDeclAssign#page12.tif | | | |

| Title of Invention | Apparatus and Method for Identifying Related Code Variants in Binaries | | |
|---|---|--|--|
| As the below nam | ed inventor, I hereby declare that: | | |
| This declaration The attached application, or is directed to: United States application or PCT international application number | | | |
| The above-identif | ied application was made or authorized to be made by me. | | |
| I believe that I am | the original inventor or an original joint inventor of a claimed invention in the application. | | |
| | edge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 nment of not more than five (5) years, or both. | | |
| Maryland and hav ASSIGNEE, desire | WHEREAS, The Johns Hopkins University, a corporation organized and existing under the laws of the State of Maryland and having its principal place of business at Baltimore, Maryland, hereinafter referred to as the ASSIGNEE, desires to acquire the entire right, title and interest in and to said invention and to any Letters Patent that may be generated therefore in the United States and its territories and in any and all foreign countries. | | |
| NOW, THEREFORE, in consideration of my employment by ASSIGNEE, I do hereby sell, assign and transfer to the ASSIGNEE the entire right, title and interest in and to said invention in the United States and its territories and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted for said invention in the United States and its territories and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof. | | | |
| I hereby authorize and request the Patent Office Officials in the United States and its territories and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its successors and assigns, to the full end of the term for which said Letters Patent may be granted. | | | |
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| LEGAL NAME OF INVENTOR | | | |
| Inventor: Margaret F. Lospinuso | | | |
| Signature: /// | august Flage Date: 15 Feb. 2013 | | |
| | JHU/APL Docket No.: 3366-SPL | | |

| Title of Invention | Apparatus and Method for Identifying Related Code Variants in Binaries |
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| EGAL NAME | F OF INVENTOR |
| wentor: Dav | vid M. Patrone |
| 1 | Date: 2/20/13 |

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| LEGAL NAME (| DF INVENTOR |
| Inventor: David | IP. Silberberg |
| Signature: All | ul P. hulling Date: 2/15/13 |
| | JHU/APL Docket No.: 3366-SPL |

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| Title of | Apparatus and Method for Identifying Related Code Variants in Binaries | | |
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| Invention | · · · · · · · · · · · · · · · · · · · | | |
| As the below nam | ned inventor, I hereby declare that: | | |
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| the ASSIGNEE the in all foreign court granted for said in | NOW, THEREFORE, in consideration of my employment by ASSIGNEE, I do hereby sell, assign and transfer to the ASSIGNEE the entire right, title and interest in and to said invention in the United States and its territories and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted for said invention in the United States and its territories and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof. | | |
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| LEGAL NAME | OF INVENTOR han D. Cohen | | |
| Inventor: | | | |
| Signature: | Date: 18 Feb 2013 | | |
| | JHU/APL Docket No 3366-SPL | | |
| | REEL: 029917 FRAME: 0370 | | |

| Title of Invention | Apparatus and Method for Identifying Related Code Variants in Binaries |
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| As the below na | med inventor, I hereby declare that: |
| This declaration is directed to: | The attached application, or United States application or PCT international application number |
| The above-ident | fied application was made or authorized to be made by me. |
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| LEGAL NAME O | FINVENTOR |
| Inventor: Ryan V | V. Gardner |
| Signature: <u>Rya</u> r | ~ W Starcher Date: 2/21/13 |
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JHU/APL Docket No.: 3366-SPL

PATENT REEL: 029917 FRAME: 0371

| Title of Invention | Apparatus and Method for Identifying Related Code Variants in Binaries | | | |
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| As the below nam | As the below named inventor, I hereby declare that: | | | |
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| LEGAL NAME OF INVENTOR | | | | |
| Inventor: Laura J. Glendenning | | | | |
| Signature: <u>f</u> u | Ma Londonning Date: 2/14/13 | | | |
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| Title of Invention | Apparatus and Method for Identifying Related Code Variants in Binaries | | | |
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| LEGAL NAME OF INVENTOR | | | | |
| Inventor: Sakunthala Harshavardhana | | | | |
| Signature: <u></u> | Sakundhala Date: 2/31/13 | | | |
| | JHU/APL Docket No.: 3366-SPL | | | |

| Invention | Apparatus and Method for Ident | ifying Related Code Variants in Binaries |
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| LEGAL NAM | E OF INVENTOR | |
| and the second | bert T. Hider | 한 법법은 한 사람은 위한 것은 가장 것이다. 1993년 - 1993년 - 1993년 1993년 1993년 - 1993년 1 |
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| Title of Invention | Apparatus and Method for Identifying Related Code Variants in Binaries | | | |
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| LEGAL NAME OF INVENTOR | | | | |
| Inventor: <u>C. Dur</u> | ward McDonell, III | | | |
| Signature: | la Current Date: 2/18/13 | | | |
| | JHU/APL Docket No.: 3366-SPL | | | |

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| LEGAL NAME OF | INVENTOR | | |
| Inventor: Dennis | S. Patrone | | |
| Signature: | _ <u>S/2013</u> Date: 2/18/2013 | | |
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| Apparatus and Method for Identifying Related Code Variants in Binaries Fitle of Invention | | |
|---|--|--|
| As the below named inventor, I hereby declare that: | | |
| This declaration The attached application, or is directed to: United States application or PCT international application number | | |
| The above-identified application was made or authorized to be made by me. | | |
| I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. | | |
| I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. | | |
| WHEREAS, The Johns Hopkins University, a corporation organized and existing under the laws of the State of Maryland and having its principal place of business at Baltimore, Maryland, hereinafter referred to as the ASSIGNEE, desires to acquire the entire right, title and interest in and to said invention and to any Letters Patent that may be generated therefore in the United States and its territories and in any and all foreign countries. | | |
| NOW, THEREFORE, in consideration of my employment by ASSIGNEE, I do hereby sell, assign and transfer to the ASSIGNEE the entire right, title and interest in and to said invention in the United States and its territories and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted for said invention in the United States and its territories and its territories and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof. | | |
| I hereby authorize and request the Patent Office Officials in the United States and its territories and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its successors and assigns, to the full end of the term for which said Letters Patent may be granted. | | |
| I hereby further agree to make, execute and deliver to the ASSIGNEE, its successors, assigns and legal representatives, upon request but at the expense of the ASSIGNEE, any and all papers, documents, affidavits, statements or other instruments that may be necessary in the prosecution of the aforesaid application, and of any United States or foreign applications, and of any divisions, reissues, continuations, substitutions and renewals of said application, or applications for reissues of said Letters Patents, and to aid the ASSIGNEE, its successors, assigns and legal representatives in every way in protecting said invention as may be requested, provided, however that I shall not have to pay any expenses arising from extending such assistance. | | |
| LEGAL NAME OF INVENTOR | | |
| Inventor: Nathan S. Reller | | |
| ignature: <u>Matham Rellee</u> Date: <u>2/18/2013</u> | | |

JHU/APL Docket No.: 3366-SPL

| Title of Invention | Apparatus and Method for Identifying Related Code Variants in Binaries | |
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| LEGAL NAME OF INVENTOR | | |
| Inventor: Benjamin R. Salazar | | |
| Signature: <u>20</u> | Ji Sh Date: 2/14/13 | |
| | JHU/APL Docket No.: 3366-SPL | |

PATENT REEL: 029917 FRAME: 0378

RECORDED: 03/04/2013