508970865 01/15/2025 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 Assignment ID: PATI752322

SUBMISSION TYPE: NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
CONVEYING PARTY DATA	Name	Execution Date
CONVEYING PARTY DATA		Execution Date 12/27/2024

RECEIVING PARTY DATA

Company Name:	STANDARD NUCLEAR, INC.
Street Address:	100 Park Avenue, Suite 3505
City:	New York
State/Country:	NEW YORK
Postal Code:	10017

PROPERTY NUMBERS Total: 45

Property Type	Number
Patent Number:	9620248
Patent Number:	10475543
Patent Number:	10032528
Patent Number:	9299464
Patent Number:	10109378
Patent Number:	10573416
Patent Number:	11101048
Patent Number:	10643754
Patent Number:	11417437
Patent Number:	10878971
Patent Number:	11557403
Patent Number:	11984232
Patent Number:	11189383
Patent Number:	11728047
Patent Number:	12068084
Application Number:	17868302
Application Number:	63639908
Application Number:	17785313
Application Number:	17785690

Property Type	Number
Application Number:	18010358
Application Number:	18008831
Application Number:	17787764
Application Number:	18278119
Application Number:	18834071
Application Number:	18839813
Application Number:	17887083
Application Number:	17946558
PCT Number:	US1162560
PCT Number:	US1643897
PCT Number:	US1724794
PCT Number:	US1663975
PCT Number:	US1722165
PCT Number:	US1719887
PCT Number:	US2332247
PCT Number:	US2412142
PCT Number:	US2114858
PCT Number:	US2116982
PCT Number:	US2146201
PCT Number:	US2146274
PCT Number:	US2116980
PCT Number:	US2232226
PCT Number:	US2313832
PCT Number:	US2313846
PCT Number:	US2332249
PCT Number:	US2326668

CORRESPONDENCE DATA

Fax Number:	8032559831	
Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.		
Phone:	(704)417-3234	
Email:	nichole.hayden@nelsonmullins.com,christine.plaisted@nelsonmullins.com	
Correspondent Name:	Nichole Hayden	
Address Line 1:	Nelson Mullins Riley & Scarborough LLP	
Address Line 2:	301 South College Street- 23rd Floor	
Address Line 4:	Charlotte, NORTH CAROLINA 28202	
ATTORNEY DOCKET NUMBER	Ultra Safe Nuclear Corp	
NAME OF SUBMITTER:	CHRISTINE PLAISTED	

SIGNATURE:	CHRISTINE PLAISTED
DATE SIGNED:	01/15/2025
Total Attachments: 11	
source=10 - Intellectual Property Assign	ment Agreement (Fully Executed) (002)#page1.tiff
source=10 - Intellectual Property Assign	ment Agreement (Fully Executed) (002)#page2.tiff
source=10 - Intellectual Property Assign	ment Agreement (Fully Executed) (002)#page3.tiff
source=10 - Intellectual Property Assign	ment Agreement (Fully Executed) (002)#page4.tiff
source=10 - Intellectual Property Assign	ment Agreement (Fully Executed) (002)#page5.tiff
source=10 - Intellectual Property Assign	ment Agreement (Fully Executed) (002)#page6.tiff
source=10 - Intellectual Property Assign	ment Agreement (Fully Executed) (002)#page7.tiff
source=10 - Intellectual Property Assign	ment Agreement (Fully Executed) (002)#page8.tiff
source=10 - Intellectual Property Assign	ment Agreement (Fully Executed) (002)#page9.tiff
source=10 - Intellectual Property Assign	ment Agreement (Fully Executed) (002)#page10.tiff
source=10 - Intellectual Property Assign	ment Agreement (Fully Executed) (002)#page11.tiff

ASSIGNMENT OF INTELLECTUAL PROPERTY

THIS ASSIGNMENT OF INTELLECTUAL PROPERTY (this "Assignment"), effective as of December 27, 2024, is made by and between ULTRA SAFE NUCLEAR CORPORATION, a Delaware corporation, ULTRA SAFE NUCLEAR CORPORATION – TECHNOLOGIES, a Washington Corporation (each an "Assignor" and collectively, the "Assignors"), and STANDARD NUCLEAR, INC., a Delaware corporation ("Assignee"). Assignor and Assignee are each referred to herein individually as a "Party" and collectively, as the "Parties."

WHEREAS, Assignors, Assignee and those certain other parties thereto are parties to that certain Asset Purchase Agreement, dated November 21, 2024 (as amended, the "*Purchase Agreement*"), pursuant to which Assignee shall acquire certain assets of Assignors consisting of the Purchased Assets and Assumed Liabilities; and

WHEREAS, in accordance therewith, Assignors desire to transfer and assign to Assignee, and Assignee desires to accept the transfer and assignment of, all of the intellectual property set forth on <u>Schedule A</u> attached hereto (the "*Intellectual Property*").

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows.

1. <u>Definitions</u>. Capitalized terms used and not defined herein shall have the meanings ascribed to them in the Purchase Agreement.

2. <u>Assignment</u>. Assignors do hereby assign to Assignee all of its legal and equitable right, title, and interest of whatever nature throughout the world in and to Assignors' Intellectual Property and all registrations and applications for registrations of any of Assignors' Intellectual Property, including the registrations identified on <u>Schedule A</u> attached hereto (collectively, the "Assigned Property"), together with the goodwill of the Business symbolized by the Assigned Property, and together with all of such Assignors' right to income, to licensing fees, and to sue and recover for past, present, and future claims or causes of action arising out of or related to any infringements, dilutions, or misappropriations of the Assigned Property, which right, title, and interest is being assigned free and clear of all encumbrances, the same to have and to hold by the Assignee as fully and entirely as the same would have been held by the Assignors had this Assignment not been made.

For all Intellectual Property that comprises a patent or patent application, the assignment includes the entire worldwide right, title, and interest in and to the same, the inventions, improvements, and discoveries disclosed therein, and any and all related patent applications and patents which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, continuations-in-part, reissues, reexaminations, renewals, restorations, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents; and all applications for industrial property protection, including without limitation, all applications for patents and utility models, which may hereafter be filed in any country or countries, together with the right to file such applications and the right to claim the priority rights derived from the respective patent application under the patent laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable; and all applications for industrial property protection, including, without limitation, all applications for patents and utility models which may hereafter be filed for said patent or patent application in any country or countries, together with the right to file such applications; and all forms of industrial property protection, including, without limitation, patents, utility models, and inventors' certificates which may be granted for said patent or patent application in any country or countries and all extensions, renewals, and reissues thereof.

Assignors hereby authorize and request the Director of the United States Patent and Trademark Office to issue any United States patent, and foreign patent authorities to issue any foreign patent, granted for the Intellectual Property, to Assignee, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by Assignee, its successors, legal representatives, and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made; and each undersigned inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Patent Application and all related patents and applications, to Assignee, its successors, legal representatives, or assigns.

Each such Assignor authorizes and requests Assignee to request the United States Patent and Trademark Office ("*USPTO*") to record Assignee as Assignee or transferee of all Intellectual Property that comprises a Trademark(s) and shall, promptly upon presentation to such Assignor by Assignee, execute, or procure the execution of, such transfer documents and provide such information as required by the USPTO, and each such Assignor hereby covenants that such Assignor has full right to convey such Assignor's entire interest herein assigned, and that such Assignor has not executed, and will not execute, any agreements in conflict herewith.

3. <u>Further Assurances</u>. Each such Assignor hereby agrees to execute, at Assignee's expense, all documents for use in applying for and obtaining patent, trademark, and copyright registrations and other rights and protections relating to the Assigned Property and enforcing the same, as Assignee may reasonably request, together with any assignments thereof to Assignee or persons designated by it. In the event Assignee is unable, after reasonable effort, to secure such Assignor's signature on any document or documents needed to apply for or prosecute any patent, trademark, copyright, or other right or protection relating to any Assignee and its duly authorized officers and agents as such Assignor's agent and attorney-in-fact to act for and on such Assignor's behalf to execute and file any such application or applications and to do all other lawfully permitted acts to further the prosecution of any patents, trademarks, copyrights, or similar protections thereon with the same legal force and effect as if executed by such Assignor.

4. <u>Validity Disputes; Use</u>. Each such Assignor agrees to assist Assignee, upon Assignee's reasonable request and at Assignee's sole expense, in any pending or threatened suits or actions by third parties challenging the validity or enforceability of any Assigned Property. Further, each such Assignor shall not directly or indirectly, challenge Assignee's ownership of or right to use any of the Assigned Property. Each such Assignor shall not directly or indirectly or indirectly use, register, or attempt to register or use any domain name, trade name, trademark, or service mark that implies an association between such Assignor and Assignee or is confusingly similar to any of the Assigned Property.

5. <u>No Third-Party Beneficiaries</u>. Nothing in this Assignment, expressed or implied, is intended or shall be construed to confer upon or give to any person, firm, corporation, association, or other entity, other than Assignee, Assignors, and each of their respective successors and assigns, any remedy or claim under or by reason of this Assignment or any agreement, term, covenant, or condition hereof, and all of the agreements, terms, covenants, and conditions contained in this Assignment shall be for the sole and exclusive benefit of Assignee, Assignors, and each of their respective successors and assigns.

6. <u>No Additional Representations</u>. This Assignment is subject in all respects to the provisions of the Purchase Agreement. This Assignment shall not be deemed to defeat, limit, alter, impair, enhance, or enlarge any right, obligation, liability, claim, or remedy created by the Purchase Agreement or any ancillary agreement thereto. In the event of any conflict or inconsistency between the terms and conditions

PATENT REEL: 069869 FRAME: 0986

set forth in this Assignment and the Purchase Agreement, the terms and conditions set forth in the Purchase Agreement shall control.

7. <u>Modification</u>. This Assignment may not be modified except by a writing executed by all the Parties hereto.

8. <u>Assignment</u>. The terms of this Assignment shall be binding upon, inure to the benefit of, and be enforceable by the Parties hereto and each of their respective successors and assigns.

9. <u>Governing Law</u>. This Assignment and the legal relations among the Parties hereto shall be governed by and construed in accordance with the laws of the State of Delaware (without giving effect to principles of conflict of laws) as to all matters.

10. <u>Headings</u>. The paragraph headings in this Assignment are for convenience only and such headings form no part of this Assignment and shall not affect its interpretation.

11. <u>Counterparts</u>. This Assignment may be executed in multiple counterparts, each of which shall be deemed an original, but all of which shall constitute the same agreement, and the execution of a counterpart of the signature page to this Agreement shall be deemed the execution of a counterpart of this Agreement. This Agreement may also be executed through the use of electronic signature, which each Party acknowledges and agrees is a lawful means of obtaining signatures in the United States. The delivery of this Agreement and the Parties' executed counterpart signature pages hereto may be made by e-mail transmission of a PDF document, and such signatures shall be treated as original signatures for all applicable purposes.

12. <u>Filing</u>. Each such Assignor hereby agrees that this Assignment may be recorded with the USPTO, the United States Copyright Office, and any other office deemed applicable by Assignee, and, accordingly, that Assignee will be reflected as the successor in title to the Intellectual Property and all applications and registrations therefore.

[Signature Page Follows]

IN WITNESS WHEREOF, this Assignment has been duly executed and delivered by the Parties as of the date first written above.

ASSIGNORS:

ULTRA SAFE NUCLEAR CORPORATION, a Delaware corporation

By:

Name: Kurt Terrani Title: Interim CEO

ULTRA SAFE NUCLEAR CORPORATION -TECHNOLOGIES, a Washington composition

a Washington corporation

By: _____

Name: Steven J. Cuevas Title: Director

ASSIGNEE:

STANDARD NUCLEAR, INC., a Delaware corporation

By: _____

Name: Thomas Hendrix Title: CEO

[Signature Page to Assignment of Intellectual Property]

PATENT REEL: 069869 FRAME: 0988 **IN WITNESS WHEREOF**, this Assignment has been duly executed and delivered by the Parties as of the date first written above.

ASSIGNORS:

ULTRA SAFE NUCLEAR CORPORATION,

a Delaware corporation

By: _____

Name: Kurt Terrani Title: Interim CEO

ULTRA SAFE NUCLEAR CORPORATION - TECHNOLOGIES,

a Washington corporation

By: ______ Name: Steven J. Cuevas Title: Director

ASSIGNEE:

STANDARD NUCLEAR, INC., a Delaware corporation

By: Thomas Hundrip

Name: Thomas Hendrix Title: CEO

[Signature Page to Assignment of Intellectual Property]

PATENT REEL: 069869 FRAME: 0989

SCHEDULE A

claim priority, including all rights associated with such patents. **Patents and Patent Applications**: the Purchased Assets shall include the following patents, patent applications, and any related patents or applications, including continuations, continuations-in-part, divisionals, reissues, reexaminations, extensions, foreign counterparts, and any rights to

Patent	Description	Number/Note
US Patent	Dispersion Ceramic Micro-Encapsulated Nuclear Fuel and Related Methods	Patent # 9,620,248
US Patent	Dispersion Ceramic Micro-Encapsulated Nuclear Fuel and Related Methods	Patent # 10,475,543
US Patent	Fully Ceramic Micro-Encapsulated Fuel for CANDUs and Other Reactors	Patent # 10,032,528
US Patent	Fully Ceramic Nuclear Fuel and Related Methods	Patent # 9,299,464
PCT Patent Application	Fully Ceramic Nuclear Fuel and Related Methods	WO/2012/075094 PCT/US2011/062560
European Patent	Fully Ceramic Nuclear Fuel and Related Methods	2647012 11813608
Russian Patent	ПОЛНОСТЬЮ КЕРАМИЧЕСКОЕ ЯДЕРНОЕ ТОПЛИВО И СООТВЕТСТВУЮЩИЕ СПОСОБЫ	2013130000 2013130000/07
Korean Patent	완전한 세라믹 핵연료 및 관련된 방법	1017938960000 1020137013776
Polish Patent	Fully Ceramic Nuclear Fuel and Related Methods	2647012 11813608
US Patent	Method for Fabrication of Fully Ceramic Micro-Encapsulated Nuclear Fuel	Patent # 10,109,378
PCT Patent Application	Method for Fabrication of Fully Ceramic Microencapsulated Nuclear Fuel	WO/2017/019620 PCT/US2016/043897
Canadian Patent	Method for Fabrication of Fully Ceramic Micro-Encapsulated Nuclear Fuel	CA Patent # 2,993,794
Spanish Patent	Método para la fabricación de combustible nuclear micro-encapsulado totalmente cerámico	2796367 16831203
Chinese Patent	Method for Fabrication of Fully Ceramic Microencapsulated Nuclear Fuel	108028080 201680043823.X
European Patent	Method for Fabrication of Fully Ceramic Microencapsulated Nuclear Fuel	3326173 16831203
Korean Patent	완전 세라믹 마이크로캡슐화된 핵연료의 제조 방법	1020180043789 1020187005090
Polish Patent	Method for Fabrication of Fully Ceramic Microencapsulated Nuclear Fuel	3326173 16831203
Korean Patent	완전 세라믹 마이크로캡슐화된 핵연료의 제조 방법	1020230148265 1020237034251
US Patent	Nuclear Fuel Particle Having a Pressure Vessel Comprising Layers of Pyrolytic Graphite and Silicon Carbide, also referred to as Enhancing Toughness in Microencapsulated Nuclear Fuel	Patent # 10,573,416
PCT Patent Application	Enhancing Toughness in Microencapsulated Nuclear Fuel	WO/2017/172948 PCT/US2017/024794
Chinese Patent	Enhancing Toughness in Microencapsulated Nuclear Fuel	109074877 201780021853.5
Canadian Patent	Enhancing Toughness in Microencapsulated Nuclear Fuel	3017974
Korean Patent	마이크로캡슐화된 핵 연료의 인성 증진	1023381640000 1020187030786

International Application No. PCT/US2023/032247, filed on Sept. 8, 2023, published as WO 2024/054601 on March 14, 2024.	Ordered Particle Fuel	PCT International Application
Provisional Patent Application # 63/639,908	Method For Manufacture of Coated Uranium-Bearing Fuel Particles for Ultra-High Temperature Energy Applications	US Patent
Patent # 12,068,084	Processing Ultra High Temperature Zirconium Carbide Microencapsulated Nuclear Fuel	US Patent
Patent # 11,728,047	Processing Ultra High Temperature Zirconium Carbide Microencapsulated Nuclear Fuel	US Patent
Patent # 11,189,383	Processing Ultra High Temperature Zirconium Carbide Microencapsulated Nuclear Fuel	US Patent
1026262430000 1020187030785	SiC 및 흑연 메트럭스 TRISO-포함 페블 연료의 신속한 처리를 위한 공정	Korean Patent
3437108 17776183	Process For Rapid Processing of Pebble Fuels	European Patent
3017896	Process for rapid processing of SiC and graphitic matrix TRISO-bearing pebble fuels	Canadian Patent
WO/2017/172177 PCT/US2017/019887	Process for rapid processing of SiC and graphitic matrix TRISO-bearing pebble fuels	PCT Patent Application
Patent # 11,984,232	Process for rapid processing of SiC and graphitic matrix TRISO-bearing pebble fuels	US Patent
Patent # 11,557,403	Process for Rapid Processing of Silicon Carbide and Graphitic Matrix TRISO-Bearing Pebble Fuels	US Patent
Patent # 10,878,971	Process for Rapid Processing of Silicon Carbide and Graphitic Matrix TRISO-Bearing Pebble Fuels	US Patent
Application # 17/868,302 Publication No. 2022/0375641	Adjusting Wait Time Between Burn Cycles or Merging Burn Cycles	US Patent Application
Patent # 11,417,437	Variable propellant density for passive reactivity control of nuclear thermal propulsion reactors	US Patent
WO/2017/222614 PCT/US2017/022165	Passive Reactivity Control of Nuclear Thermal Propulsion Reactors	PCT Patent Application
Patent # 10,643,754	Passive Reactivity Control of Nuclear Thermal Propulsion Reactors	US Patent
ZA2018/06360	Fully Ceramic Microencapsulated Fuel Fabricated with Burnable Poison as Sintering Aid	South African Patent
3437107 16897455	Fully Ceramic Microencapsulated Fuel Fabricated with Burnable Poison as Sintering Aid	Polish Patent
2835778 16897455	Combustible microencapsulado totalmente cerámico fabricado con veneno susceptible de quemarse como ayuda a la sinterización	Spanish Patent
108885907 201680084259.6	Fully Ceramic Microencapsulated Fuel Fabricated with Burnable Poison as Sintering Aid	Chinese Patent
1020180121787 1020187030784	소결 조제로서 가연성 독물질로 제조된 완전 세라믹 마이크로캡슐화된 연료	Korean Patent
3437107 16897455	Fully Ceramic Microencapsulated Fuel Fabricated with Burnable Poison as Sintering Aid	European Patent
3017939	Fully Ceramic Microencapsulated Fuel Fabricated with Burnable Poison as Sintering Aid	Canadian Patent
WO/2017/171937 PCT/US2016/063975	Fully Ceramic Microencapsulated Fuel Fabricated with Burnable Poison as Sintering Aid	PCT Patent Application
Patent # 11,101,048	Fully Ceramic Microencapsulated Fuel Fabricated with Burnable Poison as Sintering Aid	US Patent
ZA2018/06361 2018/06361	Enhancing Toughness in Microencapsulated Nuclear Fuel	South African Patent
3437106 17776569	Enhancing Toughness in Microencapsulated Nuclear Fuel	Polish Patent
3437106 17776569	Enhancing Toughness in Microencapsulated Nuclear Fuel	European Patent

		4853-8267-7234 v.7
Application # PCT/US2023/013832	RADIATION SHIELDING FOR RADIOISOTOPE BATTERY-POWERED VEHICLE	PCT International Application
Application # 18/834,071	RADIATION SHIELDING FOR RADIOISOTOPE BATTERY-POWERED VEHICLE	US Patent
Application # PCT/US2022/032226 Publication # WO 2022/271433	FUEL-MODERATOR INVERSION FOR SAFER NUCLEAR REACTORS	PCT International Application
Application # 18/278,119	FUEL-MODERATOR INVERSION FOR SAFER NUCLEAR REACTORS	US Patent
Application # 10-2023-7045406	FUEL-MODERATOR INVERSION FOR SAFER NUCLEAR REACTORS	Korean Patent
Application # 2023-570223 Publication # 2024-521660	FUEL-MODERATOR INVERSION FOR SAFER NUCLEAR REACTORS	Japanese Patent
Application # 22828992.2 Publication # EP4348684A1	FUEL-MODERATOR INVERSION FOR SAFER NUCLEAR REACTORS	European Patent
Application # 3,220,042	FUEL-MODERATOR INVERSION FOR SAFER NUCLEAR REACTORS	Canadian Patent
Application # PCT/US2021/016980 Publication # WO2021/159041	CHARGEABLE ATOMIC BATTERY WITH PRE-ACTIVATION ENCAPSULATION MANUFACTURING	PCT International Application
Application # 17/787,764	CHARGEABLE ATOMIC BATTERY WITH PRE-ACTIVATION ENCAPSULATION MANUFACTURING	US Patent
Application # 10-2022-7030706	CHARGEABLE ATOMIC BATTERY WITH PRE-ACTIVATION ENCAPSULATION MANUFACTURING	Korean Patent
Application # 3,165,403	CHARGEABLE ATOMIC BATTERY WITH PRE-ACTIVATION ENCAPSULATION MANUFACTURING	Canadian Patent
Application # PCT/US2021/046274 Publication # WO2022/076084	COMBINED AMMONIA-BASED MODERATOR AND PROPELLANT FOR NUCLEAR THERMAL PROPULSION STAGES	PCT International Application
Application # 18/008,831 Publication # US-2023-0211898-A1	COMBINED AMMONIA-BASED MODERATOR AND PROPELLANT FOR NUCLEAR THERMAL PROPULSION STAGES	US Patent
Application # 21878176.3 Publication # 4197009	COMBINED AMMONIA-BASED MODERATOR AND PROPELLANT FOR NUCLEAR THERMAL PROPULSION STAGES	European Patent
Application # 3,189,136	COMBINED AMMONIA-BASED MODERATOR AND PROPELLANT FOR NUCLEAR THERMAL PROPULSION STAGES	Canadian Patent
Application # PCT/US2021/046201 Publication # WO2022/040116	CONTROL DRUM CONTROLLER FOR NUCLEAR REACTOR SYSTEM	PCT International Application
Application # 18/010,358 Publication # US 2023-0230714 A1	CONTROL DRUM CONTROLLER FOR NUCLEAR REACTOR SYSTEM	US Patent
Application # 21858921.6 Publication # 4197001	CONTROL DRUM CONTROLLER FOR NUCLEAR REACTOR SYSTEM	European Patent
Application # 3,189,128	CONTROL DRUM CONTROLLER FOR NUCLEAR REACTOR SYSTEM	Canadian Patent
Application # PCT/US2021/016982 Publication # WO2021/159043	CHARGEABLE ATOMIC BATTERY AND ACTIVATION CHARGING PRODUCTION METHOD	PCT International Application
Application # 17/785,690 Publication # US 2023-0051201 A1	CHARGEABLE ATOMIC BATTERY AND ACTIVATION CHARGING PRODUCTION METHOD	US Patent
Application # 10-2022-7030705	CHARGEABLE ATOMIC BATTERY AND ACTIVATION CHARGING PRODUCTION METHOD	Korean Patent
Application # 3,165,395	CHARGEABLE ATOMIC BATTERY AND ACTIVATION CHARGING PRODUCTION METHOD	Canadian Patent
Application # PCT/US2021/014858 Publication # WO2021/151055	SKEWED-PIN (SPIN) MODERATOR BLOCKS FOR NUCLEAR REACTOR	PCT International Application
Application # 17/785,313 Publication # US 2023-0024338 A1	SKEWED-PIN (SPIN) MODERATOR BLOCKS FOR NUCLEAR REACTOR	US Patent
Application # 10-2022-7029118	SKEWED-PIN (SPIN) MODERATOR BLOCKS FOR NUCLEAR REACTOR	Korean Patent
Application # 3,165,139	SKEWED-PIN (SPIN) MODERATOR BLOCKS FOR NUCLEAR REACTOR	Canadian Patent
International Application No. PCT/US2024/12142, filed on January 19, 2024, published as WO/2024/155880 on July 25, 2024.	Additive Manufacturing of Fiber-Reinforced Composites with Refractory Matrix Materials	PCT International Application

PATENT REEL: 069869 FRAME: 0992

4853-8267-7234 v.7

		Publication # WO 2024/072479
US Patent	RADIOISOTOPE POWER SYSTEM FOR VEHICLE	Application # 18/839,813
PCT International Application	RADIOISOTOPE POWER SYSTEM FOR VEHICLE	Application # PCT/US2023/013846 Publication # WO2023/164149
PCT International Application	SPIRAL NTP FUEL FOR POWER FLATTENING	Application # PCT/US2023/032249 Publication # WO 2024/118125
PCT International Application	HIGH-POROSITY CERAMIC BURNABLE ABSORBERS	Application # PCT/US2023/026668
US Patent	FULLY CERAMIC ENCAPSULATED RADIOACTIVE HEAT SOURCE	Application # 17/887.083 Publication # US 2023-0023052 A1
US Patent	FULLY CERAMIC ENCAPSULATED RADIOACTIVE HEAT SOURCE	Application # 17/946,558 Publication # US 2023-0197306 A1

<u>Registered Trademarks</u>:

4853-8267-7234 v.7

All videos, instructional material, blogs, white papers, marketing material, and the like.

Copyrights:

Interview Other Safe Nuclear Corporation 1689526 Ultra Safe Nuclear Corporation 1690070 Ultra Safe Nuclear Corporation
Ultra Safe Nuclear Corporation
Ultra Safe Nuclear Corporation Ultra Safe Nuclear Corporation
Ultra Safe Nuclear Corporation
Ultra Safe Nuclear Corporation Ultra Safe Nuclear Corporation
Ultra Safe Nuclear Corporation
Ultra Safe Nuclear Corporation
Ultra Safe Nuclear Corporation
Ultra Safe Nuclear Corporation
Ultra Safe Nuclear Corporation
超安全核能公司 ULTRA SAFE NUCLEAR CORPORATION
Ultra Safe Nuclear Corporation
Ultra Safe Nuclear Corporation
Ultra Safe Nuclear Corporation
Ultra Safe Nuclear Corporation
Owner

REEL: 069869 FRAME: 0994

I	T.
I	Η.
I	20
I	۵.
I	ē
I	5
I	Ċ.
I	2
I	5
I	œ
I	5
	••

Trade Secret	P&IDs (Piping and Instrumentation Diagrams)	Detailed designs of proprietary equipment USNC has designed to fabricate fuel
Trade Secret	Hazards and Operability Studies	Detailed assessments of safety hazards and mitigation strategies for each component and stop of operations
Trade Secret	Procedures	Detailed procedures on how to operate equipment and process
Trade Secret	Work Instructions: Same as above	Detailed procedures on how to operate equipment and process
Trade Secret	Various detailed designs, CAD files, drawings; detailed documentation of various in-house designed items such a graphite cones for TRISO coating)	Detailed documentation of various in-house designed items, for example, graphite cones for TRISO coating
Trade Secret	Coated Particle Fuel (TRISO and other variants)	TRISO fuel architecture and the manufacturing process for TRISO fuel particles; includes development of other advanced coated particle variants, including larger kernels, altered kernel compositions, and altered coating layers.
Trade Secret	Additive Manufacturing (AM) and CVI process (AM/CVI) SiC and FCM Fuel	Manufacturing methods; bonding methods.
Trade Secret	High Temperature Carbide Deposition (ZrC and other carbides)	Manufacturing methods: infiltration and deposition of ZrC
Trade Secret	Ordered particle fuel element production	Manufacturing methods
Trade Secret	Production of metal hydrides	Manufacturing methods; metal hydrides of ZrH and YH using the bulk hydriding methods
Trade Secret	Encapsulation of metal hydrides in SiC	Manufacturing methods

Proprietary Software:

Software Name	Description
Fuel manufacturing module I&C software	Fuel manufacturing module I&C software Custom developed software and associated hardware for various fuel manufacturing processes. Developed in-house by USNC staff.
ТРЗ	TRISO particle fuel performance and radionuclide transport and release. Underpins MMR regulatory approach to offsite dose calculations. Developed in-house by USNC staff.
Source Term Transport and Release	Proprietary Python-based tool to model source term transport, holdup, cleanup, and release for gas-cooled reactor systems. This tool uses the output from TP3 and combines this source of activity with activation sources throughout the system which further underpins USNC's regulatory approach to source term release. <i>Developed in-house by USNC staff:</i>
Fuel labeling and recognition	Collection of tools to uniquely label USNC's FCM fuel for MMR + machine-learning tools to read the labels through various states of the FCM manufacturing process. Developed in-house by USNC staff.

Websites:

Henc com	GoDaddy Online Services Cayman Islands I Id	TISUC	2022-03-12
USIIC.COIII	OUDAUUY OIIIIIE SETVICES CAYIIIAII ISTAIIUS LAU.	UGINC	21-00-12
3dcarbide.com	Souarespace Domains II LLC	USNC	2027-05-17

Social Media Accounts:

4853-8267-7234 v.7

LinkedIn	YouTube	X	Platform
https://www.linkedin.com/company/usnc/	https://www.youtube.com/channel/UCqgfxstJUW4LBOSIJmeN8xw	https://x.com/UltraSafeNuke	Link