

William (Bill) D. Peterson, with  
300-Year SNF Disposal &  
3-Year Fuel & Deficit Recovery Plan,  
413 Vine Street,  
Clearfield, Utah 84015,  
Tel 801-825-3123, Email [paengineers@iuno.com](mailto:paengineers@iuno.com)

**UNITED STATES DISTRICT COURT OF APPEALS**

**DISTRICT OF COLUMBIA CIRCUIT**

333 Constitution Avenue, NW, Room 5523  
Washington, DC 20001-2866

Phone: 202-216-7290 Facsimile: 202-219-8530

MAY 24 2010

William (Bill) D. Peterson, Engineer for  
300-Year SNF Disposal Solution &  
3-year Fuel and Economy Recovery Plan,  
Plaintiff

MOTION

vs.

Case No. 10-1007

United States of America  
Nuclear Regulatory Commission, et al.\*  
Atomic Safety and Licensing Board  
Defendant

\* Spent Nuclear Fuel plan Defendant – Appellee parties are: NRC - Nuclear Regulatory Commission, DOE - Department of Energy, EPA - Environmental Protection Agency, NAS - National Academies of Science, and NEI - Nuclear Energy Institute.

\* Fuel and Economic recovery plan Defendant – Appellee parties are: DOC - Department of Commerce, DOL - Department of Labor, DOT - Department of the Treasury, FTC -Federal Trade Commission, and the TPCC - Trade Promotion Coordinating Committee

\* Other Federal Administrative parties of interest are: Former Nuclear Waste Negotiator, Idaho Congressman Richard Stallings, and President Barack Obama.

**MOTION**

**to find U.S. Deficit spending with France  
and other Foreign Nations for Nuclear Development Work is  
Unconstitutional**

Peterson moves the Court find that the U.S. Government's ongoing contracting with Foreign Nations for goods and services and committing America to debt to pay for it is impossible economics, is a commitment of U.S. money that in reality the U.S.

Government does not have. It is unlawful. It is unconstitutional. It is a grievous giving

away of American jobs, and is a grievous giving away American intellectual technology and America's future.

In the Idaho Falls *Post Register Online* at Postregister.com, on May 20<sup>th</sup> 2010, the following Post Register Breaking News article appeared:

---

Areva has won a U.S. Department of Energy \$2 billion loan guarantee for the construction of a uranium enrichment plant near Idaho Falls, the Energy Department announced Thursday.

The guarantee is conditional upon Areva obtaining an operating license for the Idaho Falls plant from the U.S. Nuclear Regulatory Commission.

Areva applied for the loan guarantee in December 2008 and is already deep in the planning process for its Idaho Falls plant, whose total construction cost is estimated at \$3.3 billion.

"It's a great step forward for us," Bob Poyser, Areva's vice president in charge of Idaho Falls operations, said of the loan guarantee. "It'll give us the ability to go out and get financing for the project."

Areva officials said the company hopes to secure its license sometime in 2011 and begin construction of the plant soon thereafter. The plant's construction phase is estimated to create 1,000 jobs in eastern Idaho. As soon as it's operational, the plant would also employ hundreds of workers permanently.

---

**AREVA** (Euronext: CEI) is a French public multinational industrial conglomerate that is mainly known for nuclear power; it also has interests in other energy projects. It was created on 3 September 2001, by the merger of Framatome (now AREVA NP), Cogema (now AREVA NC) and Technicatome (now AREVA TA). Its main shareholder is the French-owned company CEA, but the German company Siemens also retains 34% of the shares of AREVA's subsidiary, AREVA NP, in charge of building the EPR Reactor, an advanced Generation III+ nuclear reactor.<sup>[1]</sup>

The parent company is incorporated under French law as a société anonyme (SA: public corporation) and is also recognized as a public limited company in Britain and a corporation in American jurisdictions. The French State owns more than 90%. The corporate name AREVA is inspired by Arevalo Abbey in Spain. Anne Lauvergeon is the Chairman of the Executive Board (equivalent to President and CEO). AREVA official Ralf Guldner is the vice-chairman of the World Nuclear Association.

According to the company official website, Areva realized € 13,16 billion in sales revenue in 2008 and €417 million in operating incomes<sup>[2]</sup>

---

Idaho National Laboratory is an American preeminent leader in development of nuclear chemistry. Peterson with his 300-year plan for permanent disposal of spent nuclear fuel works to solve the spent nuclear fuel issue. The transuranics from spent nuclear need to be used as enrichment of nuclear fuel. This is an asset in SNF and good in a solution to dispose of SNF. Peterson has been seeking a U.S. Patent for the 300-year SNF disposal solution for eight years. Chemists in Idaho have patented technology in the chemistry of uranium enrichment and SNF disposal.

Peterson moves the Court find nuclear power development of and for the U.S., and must be done in the U.S., by U.S. companies and Departments in the U.S. Government including EPA, DOE, NRC, DOC and FTC.

Dated this 22<sup>nd</sup> Day of May, 2010.



William (Bill) D. Peterson, Petitioner, Pro Se

#### CERTIFICATE OF SERVICE

96) I certify that a true and correct copy of the foregoing PLEADING was sent First Class, email and U.S. Mail Saturday, May 22, 2010 to:

97) Stephanie Liaw, Esq.  
Nuclear Regulatory Commission  
Office of the General Counsel  
Mail Stop O15D21  
11555 Rockville Pike  
Rockville, Maryland, 20852

98) James Kilbourne, Esq., c/o Gail Mairanda,  
representing: USPTO; DOE & EPA; DOL, DOT, FTC, TPCC,  
Richard Stallings,  
and President Barack Obama  
U.S. Department of Justice  
Environment and Natural Resources Division

Law and Policy Section Tel 202-514-9321  
P.O. Box 4390  
Ben Franklin Station  
Washington, DC 20044-4390

- 99) Clerk of the Appellate Court by U.S. Mail.  
333 Constitution Avenue, NW, Room 5523  
Washington, DC 20001-2866

Electronically sent by Email To:

- 100) James Kilbourne, Esq., c/o Gail Mairanda,  
Blue Ribbon Commission c/o Tim Frazier  
BRC Designated Federal Officer,

- 101) NRC Clerk's office c/o Emile Julian

- 102) Jay Silberg, Esq.,  
NEI Counsel,

- 103) James F. Hinchman, Esq.,  
NAS General Counsel

- 104) Bob Bauer, Esq.,  
Personal Counsel for President Barack Obama



William (Bill) D. Peterson

- 105) WDP Computer file No. C:\OldHardDrive\pnuc\DC circuit 09\Mot Areva unlawful 52210.doc

William (Bill) D. Peterson, with  
300-Year SNF Disposal &  
3-Year Fuel & Deficit Recovery Plan,  
413 Vine Street,  
Clearfield, Utah 84015,  
Tel 801-825-3123, Email [paengineers@juno.com](mailto:paengineers@juno.com)

-----  
**UNITED STATES DISTRICT COURT OF APPEALS**  
**DISTRICT OF COLUMBIA CIRCUIT**  
333 Constitution Avenue, NW, Room 5523  
Washington, DC 20001-2866  
Phone: 202-216-7290 Facsimile: 202-219-8530  
-----

William (Bill) D. Peterson, Engineer for  
300-Year SNF Disposal Solution &  
3-year Fuel and Economy Recovery Plan,  
Plaintiff

NOTICE OF APPEAL

vs.

Case No. 10-1007

United States of America  
Nuclear Regulatory Commission, et al.\*  
Atomic Safety and Licensing Board  
Defendant

-----  
\* Spent Nuclear Fuel plan Defendant – Appellee parties are: NRC - Nuclear  
Regulatory Commission, DOE - Department of Energy, EPA - Environmental  
Protection Agency, NAS - National Academies of Science, and NEI - Nuclear  
Energy Institute.

\* Fuel and Economic recovery plan Defendant – Appellee parties are: DOC -  
Department of Commerce, DOL - Department of Labor, DOT - Department of the  
Treasury, FTC -Federal Trade Commission, and the TPCC - Trade Promotion  
Coordinating Committee

\* Other Federal Administrative parties of interest are: Former Nuclear Waste  
Negotiator, Idaho Congressman Richard Stallings, President Barack Obama, and  
**USPTO - U.S. Patent and Trademarks Office.**

NOTICE OF APPEAL OF U.S. PATENT APPLICATION SERIAL NO. 111899,209

TO THE: **UNITED STATES DISTRICT COURT OF APPEALS**  
**DISTRICT OF COLUMBIA CIRCUIT**

From the UNITED STATES PATENT OFFICE

Paper #     

Applicant: William Donald Peterson II            )  
Serial No: 11/899,209, parent 10/736-858        )  
Filing Date: 09/04/07                                )  
For: 300-year spent nuclear fuel (SNF)            )     Group Art  
Disposal Solution                                     )     Unit No. 3663

)

Ref. Spent Nuclear Fuel (SNF) Rads )

)

Examiner: Palabrica, Ricardo J. 571-272-6880 )

Group FAX 571-273-8300 )

Supervisor, Jack Keith 571-272-6878 )

May 18,2010

Dear Commissioner:

1) By this paper the applicant seeks assistance from the Court of Appeals to overcome the objections of the examiner's paper[s] # \_\_\_\_\_, dated June 16,2009 and February 5<sup>th</sup> 2010.

2) Peterson works to dispose of spent nuclear fuel (SNF) by his process he calls the 300-year SNF permanent disposal solution. 3) Key to doing this is 5-9s i.e. 99.999% separation of the transuranics (1% of the SNF) out of the fission wastes (3% of the SNF). 4) The fission wastes are then clean enough of the transuranics so that after 300-years the entrained cesium and strontium and other 30-years and less half life materials in the SNF have decayed 1000 fold, so that in 300-years the fission waste then qualify as low level wastes Class-C. 5) In another 500-years the fission waste qualify as low-level wastes Class-A, and can have limited association with habitat. 6) The 1% of SNF that is 6,000 years plus half life transuranics are put with new fuel and consumed as fuel, other wise they would be a problem out a long ways in time. 7) This eliminates the need for 10,000 to one million years of storage as has been proposed in the Yucca Mountain SNF disposal concept. 8) The 96% part of SNF that is uranium U<sub>238</sub> is safe to the habitat and simply stockpiled like cylinders of iron. 9) So in 300-years the SNF is effectively disposed of. 10) That is it will become increasingly habitable to coexist with and not be an escalating problem. 11) As described in the April 1<sup>st</sup>, 2009 ruling of the U.S. Court of Appeals for the Federal Circuit in *Bilski*, the SNF is physically transformed from an ever increasing dangerous radioactive material into an ever lower, and eventually safe on going lowering radiation materials, i.e. a physical transformation of existing SNF to a safe state.

12) It was in 2002 that Peterson originally applied for a U.S. patent of his 300-year process. 13) Originally the Patent Examiner maintained that what Peterson was attempting to do was impossible. 14) That application and a following second application has lingered for six years longer than it should. 15) Peterson complains that the Patent Examiner has strayed to far from Peterson's specification. 16) The Examiner has stated:

17) "Prior to focusing on specific statutory requirements, USPTO personnel must begin examination by determining what, precisely, the applicant has invented and is seeking to patent, and how the claims relate to and define that invention. 18) (As the courts have repeatedly reminded the USPTO: 19) "The goal is to answer the question: 20) What did applicants invent?" Examiner Ricardo J Palabrica

21) Peterson maintains that the Examiner has strayed unreasonably far from the situation of the invention. 22) The Examiner has referenced no patented or otherwise solution for SNF disposal. 23) The examiner has referenced no patented process having the very high 5-9s i.e. 99.999% degree of separation and the related 300-years of storage time to attain sufficient radiation decay. 24) Also no process is referenced to do the above and in addition use the separated transuranics and U<sub>238</sub> uranium in the future as fuel.

Peterson reiterates:

*25) "The Examiner has missed the situations of the invention. 26) The invention is no singular process, time, or event. 27) It's a combination of many processes, times and events, without any of which the specific 300-year disposal process of the SNF will not happen. 28) " See section 20, page 4 and section 44, page 9 of the 9/17/09 Response. William Peterson*

29) Peterson's SNF disposal technology is urgently needed. 30) Without it nuclear power cannot advance. 31) Without nuclear power, electricity – hydrogen cannot be manufactured to replace the use of oil. 32) The U.S. deficit to import oil stands at around ½ trillion dollars per year. 33) For the past six years of the delay of publishing this technology by a patent is three (\$3) trillion dollars, imbalance of trade has occurred. 34) That is half of the six trillion dollars deficit, which could have been averted where the U.S. could have gotten its trade situation into balance. 35) Now the deficit is approaching the nation's GDP.

36) In page 6, 2<sup>nd</sup> paragraph, of the Patent Examiner's 06/16/2009 paper he wrote, "Each government decides on the waste management strategy and specific plans for implementation of this strategy. 37) Some governments e.g. United Kingdom include reprocessing as part of their program (see R4), while others, e.g., Canada and the U.S., do not reprocess their spent fuel (see R5)." 38) Peterson's numbers are not political whims.

39) Back on page 4 the last paragraph he says: 40) "There is neither an adequate description nor enabling disclosure as to what is all encompassed and meant by introduced into the environment without hazardous results." 41) "For example, what is the criterion for determining whether the so-called waste introduction produces hazardous or

non-hazardous results, 42) what specific hazards have to be precluded, 43) how and what manner would the wastes should be introduced so as not to produce hazardous results.”

44) Peterson's point is that governments, actually do not understand the situation nor has knowledge of Peterson's 300-year SNF disposal solution, and will likely never understand it, but after seeing it published by the U.S. Patent Office, then seeing it put into operation In the U.S., foreign governments will go for it. 45) Most scientists, members of the U.S. Congress, then most foreign governments went for Yucca Mountain type geological burial. 46) Only a very few, like engineer Peterson and Energy Secretary Chu realized that it was not going to work.

47) As previously pointed out, there is another issue of the Patent Office where Peterson's questions can apply. 48) In Page 3, item 4, about compliance with the enablement requirement, the Examiner says: 49) "The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and /or use the invention." 50) The situation is that there are only a handful of scientists in the world who would be at all able to understand and do the 5-9s process that is required. 51) When Peterson discovered the physical transformation requirement for doing SNF disposal his way, when the 5-9s separation requirement got to nuclear scientists who were skilled in that work, they understood the necessity, and got busy and came up with a system different from Peterson's for the 5-9s separation. 52) They did this when the patent office maintained that the high 5-9s Peterson specified was not even possible to do and so denied Peterson a patent. 53) Still today, few scientists, possibly not even the Patent Office realize that in Sept. 29, 2005 a group of Idaho nuclear chemists came up with a good way to do 5-9s separation. 54) Their Patent No. 20050211955 does the 5-9s separation needed by Peterson's 300-year process, 55) their process could be better than Peterson's proposed series of three times through the Purex process.

56) Back in the 1970s Peterson fixed a comparable situation where physicians did not know of or understand a basic physical cold ice water situation they created that was killing their transplant organs in transit which situation Peterson fixed by his process described in U.S. Patent No. 3810367. 57) When doctors first started having human organs transported around the nation and putting them with matching recipients, they simply put organs into a container of normal saline, then they took ice out of a freezer, packed the ice around the organ containing container then shipped it out on an airline. 58) They did not realize that Ice in a freezer is typically at a temperature of 0 Deg. Fahrenheit, and it could freeze the normal saline in the organ before stabilizing at 32 Degrees Fahrenheit.

59) Peterson's 300-year time and 5-9s separation requirements are not "a matter of optimization for those cases that reprocess their spent fuel (e.g., UK)," or "balancing of costs" as Patent Examiner Palabrica states in his 06/16/2009 paper on page 7 in the 4<sup>th</sup> paragraph. 60) And they are not numbers that can be changed for political whim i.e. "national policy" as Patent Examiner Palabrica infers in 9<sup>th</sup> line of the 3<sup>rd</sup> paragraph on page 6 of his in his 06/16/2009 paper.

61) Peterson's times of 5 years, 50 years, 300 years, and 500 more years, and his 5-9s (99.999%) separation requirement are not numbers of optimization, optimal costs, or political whim. 62) They are a specific combination of specific requirements for specific events to obtain specific physical transformations of materials in existing SNF, to dispose of it, so that the SNF literally no longer exists. 63) This is a physical transformation of dangerously radioactive elements of SNF into elements that in time will become safe to human habitat, which is invention, ref this Court's order in *Bilski*.

64) Peterson believes that Examiner Palabrica showing use of Peterson's numbers separately shows that Palabrica does not understand what Peterson is doing here. 65) No where does Palabrica show the use of all of Peterson's numbers together in one process system. 66) In fact, nowhere does Palabrica show disposal of SNF so that its dangerously radioactive elements of SNF no longer exist.

67) This patent work to get the technology before the public and understood by the public as best it can has now gone on for eight years. 68) In that time the U.S. deficit has gone from \$6 trillion to \$12 trillion. 69) The U.S. has to realize that American deficit is its imbalance of trade, which much be fixed. 70) The biggest single problem is the U.S. must become oil independent which requires nuclear electricity-hydrogen which requires it's being able to dispose of its SNF. 71) The delay in Peterson's being able to implement 300-year disposal of America's SNF has cost the U.S. \$6 trillion in additional and unnecessary deficit which is bankrupting the U.S. and the rest of the World with us.

72) Yucca Mountain will not work for the type of SNF disposal that is needed. 73) The 96% part that is U238 uranium and the 1% part that is transuranics need to be recovered for use as future fuel. 74) The President and Secretary of Energy have formed a new Blue Ribbon Committee to try to find a solution for SNF disposal, 75) and then in two years make a recommendation for the new process that they may find. 76) Two years is another two trillion dollars of debt and deficit, half of that to buy oil, which the U.S. cannot now pay for. 77) The very salvation of the U.S. depends on finding an SNF disposal solution, 78) and Peterson believes that there is no other solution than his 300-year solution.

79) This is technology that might have been developed years ago by nuclear scientists in the employ of the U.S. Department of Energy (DOE) or its subcontractors, 80) but this work stopped and so has not been possible since the 1977 proclamation of President Jimmy Carter that the U.S. would not process spent nuclear fuel (SNF). 81) This 32 year old proclamation would preclude anyone being funded by the U.S. Government, 82) and would preclude Universities like Massachusetts Institute of Technology (MIT) and organizations like the National Academies of Sciences (NAS) from working on reprocessing of SNF.

83) Consequently, in reality **and** in the law, Peterson knows of no one "skilled in the art of reprocessing *and disposal of SNF*" except himself and his scientific group, ref 35 U.S.C. 112. 84) Never the less, in 2004 in the U.S. Court of Appeals for the District of Columbia Circuit in Case No. 01-1258 the disposal issue of SNF was extensively looked at, testimony was obtained from some 60 nuclear scientists from organizations including MIT, NAS, and the Nuclear Energy Institute (NEI). 85) The court basically concluded that there was no actual way of really "disposing" of SNF, 86) so ordered that EPA would require SNF to be stored in YM for one million years to protect the public. 87) See page 21 of the Court's 100 page Order. 88) In U.S. District Court for the State of Utah in Case No. 2:09-MC-00188 Peterson is seeking a similar review of SNF disposal, but this time considering the 300-year SNF disposal solution. 89) Peterson believes that recovery of the U.S. economy may not be possible until the U.S. has replaced oil imports with U.S. manufactured nuclear-hydrogen. 90) This would require a real time disposal solution for SNF, 91) which the 300-year SNF disposal solution does.

92) Peterson's most recent pleading in 10-007 in the Appellate court and a transcript of a copy of the Thursday morning meeting of the President and Secretary of Energy's Blue Ribbon Commission were included with this appeal notice to the PTO and Attorney Stephanie Liaw. 93) Also an example sheet on the tragedy of the U.S. loss of the Westinghouse Nuclear Company was included.

94) Peterson has been working on this for 20 years with no reiteration, 95) so he needs and seeks informa papyrus financial consideration from the Patent Office and courts.

Sincerely yours,



William (Bill) D. Peterson

CERTIFICATE OF SERVICE

96) I certify that a true and correct copy of the foregoing PLEADING was sent First Class, U.S. Mail Tuesday, May 18, 2010 to:

97) Stephanie Liaw, Esq.  
Nuclear Regulatory Commission  
Office of the General Counsel  
Mail Stop O15D21  
11555 Rockville Pike  
Rockville, Maryland, 20852

98) James Kilbourne, Esq., c/o Gail Mairanda,  
representing: USPTO; DOE & EPA; DOL, DOT, FTC, TPCC,  
Richard Stallings,  
and President Barack Obama  
U.S. Department of Justice  
Environment and Natural Resources Division  
Law and Policy Section Tel 202-514-9321  
P.O. Box 4390  
Ben Franklin Station  
Washington, DC 20044-4390

99) Clerk of the Appellate Court by U.S. Mail.  
333 Constitution Avenue, NW, Room 5523  
Washington, DC 20001-2866

Electronically sent by Email To:

100) James Kilbourne, Esq., c/o Gail Mairanda,  
Blue Ribbon Commission c/o Tim Frazier  
BRC Designated Federal Officer,

101) NRC Clerk's office c/o Emile Julian

102) Jay Silberg, Esq.,  
NEI Counsel,

103) James F. Hinchman, Esq.,  
NAS General Counsel

104) Bob Bauer, Esq.,  
Personal Counsel for President Barack Obama

  
William (Bill) D. Peterson

105) WDP Computer fileNo. C:\OldHardDrive\pnuc\pat\pat41-WDP May 15 2010 appeal-doc

## ISSUES

3-Year Fuel independence      Tue, May 18,2010  
Deficit Recovery Plan  
300-Year SNF Disposal &  
U.S. Patent No. 11/899,209

Hi,

Pleading for Peterson's 3-Year Fuel & Deficit Recovery Plan; herewith, brings forth three issues: Deficit Recovery to preserve the national economy, 300-Year SNF Disposal to enable nuclear-electricity hydrogen for a replacement fuel to replace the use of foreign oil, and appeal of U.S. Patent No. 11/899,209 to preserve for the US. The technology of spent nuclear fuel disposal to enable the manufacturing of nuclear-electricity hydrogen, for an oil replacement.

Is this the correct counsel for the issues? See page 7.

This issue supports Peterson's motion to find U.S. Deficit spending with France and other Foreign Nations for Nuclear Development Work is Unconstitutional.

Thank you, Sincerely,



William D. (Bill) Peterson

Cc: Stephanie Liaw

Gail Mairanda DOJ, The Blue Ribbon Commission on Nuclear Power, Emile Julian at NRC Office of Secretary - Rebecca, Nuc Attorney for Richard Stallings Robert Mussler, former Idaho Congressman Richard Stallings, Jay E. Silberg - Esq. Counsel for NEI, James F. Hinchman – NAS General Counsel, Peterson Office file, Bob Bauer - White House Counsel to Federal Court

<b>Office Action Summary</b>	<b>Application No.</b> 11/899,209	<b>Applicant(s)</b> PETERSON, WILLIAM D.	
	<b>Examiner</b> Rick Palabrica	<b>Art Unit</b> 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

§

**Attachment(s)**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-548)</li> <li>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br/>Paper No(s)/Mail Date: _____</li> </ul> | <ul style="list-style-type: none"> <li>4) <input type="checkbox"/> Interview Summary (PTO-413)<br/>Paper No(s)/Mail Date: _____</li> <li>5) <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6) <input type="checkbox"/> Other _____</li> </ul> |
|---|--|

Application/Control Number: 111899,209  
Art Unit: 3663

Page 2

**DETAILED ACTION**

1. Applicant's 9/17/09 Response, which traversed the rejection of claims in the 6/16/09 Office action, is acknowledged. Applicant's arguments have been fully considered but they are not persuasive.

**Response to Arguments**

2. In response to the rejection on the claim 1 based on 35 U.S.C. 112, first paragraph, as discussed in section 4 of the 6/16/09 Office action, applicant argues that,

*"The Examiner has missed the situations of the invention. The invention is no singular process, time, or event. It's a combination of many processes, times and events, without any of which the specific 300-year disposal process of the SNF will not happen." See section 20, page 4 and section 44, page 9 of the 3/7/09 Response.*

The examiner disagrees.

The claims define the invention, as per MPEP 2106.01 (DETERMINE WHAT APPLICANT HAS INVENTED AND IS SEEKING TO PATENT), which states:

"Prior to focusing on specific statutory requirements, USPTO personnel must begin examination by determining what, precisely, the applicant has invented and is seeking to patent, and how the claims relate to and define that invention. (As the courts have repeatedly reminded the USPTO: "The goal is to answer the question What did applicants invent?" In re Abele, 684 F.2d 902, 907, 214 USPQ 682, 687 (CCPA 1982). Accord, e.g., Arrhythmia Research Tech. v. Crazonix Corp., 958 F.2d 1053, 1059, 22 USPQ2d 1033, 1038 (Fed. Cir. 1992).") Cinderlining provided.

The applicant is claiming a method, and a method comprises a series of steps

The recited step cited in the rejection, i.e.,

*"wherein said spent nuclear fuel is processed, subsequent to its being stored in said water storage for at least five years, to remove at least 99.999% of the transuranics from said spent nuclear fuel, said processed spent nuclear fuel thereafter being retained in storage for a subsequent 100 years and thereafter being disposed of, said transuranics being removed from said spent nuclear fuel and subsequently being utilized to produce new nuclear fuel,"*

Application/Control Number: 11/899,209  
Art Unit: 3663

Page 3

directly follows the step of:

*"placing said spent nuclear fuel into a convection air cooled concrete shielded storage."*

Note that the dictionary defines the term, "subsequent to" as "following in time, order or place."

Clearly, before the above "placing step" is initiated, the spent fuel has already been processed and in fact new fuel has already been produced. Thus, the spent fuel no longer exists, as stated in said section of the 6/16/09 Office action. Applicant's arguments are unpersuasive because the applicant has not shown that the examiner's reasoning for rejection of the claims is improper or invalid.

3. Applicant traversed the rejection of claims based on the applied art in section 6 of the 6/16/09 Office action on the grounds that:

*"For now, like the U. S., no country makes SNF safe for association to human habitat. None of them burn up the transuranics for fuel." (see section 50, page 11 of the 9/17/09 Response).*

The examiner disagrees.

Either one of Ackerman et al. (U.S. 5,147,616) or Miller (U.S. 5,141,723) teach(es) the removal of "transuranic or transuranic actinides from the uranium so that the transuranic actinides can be used as core fuel." See col. 1, lines 33+ in either reference.

4. Applicant traversed applied art, "Advanced Fuel Cycle Initiative: Status Report for FY 2005" on the ground that it does not disclose or teach,

*"99.999% of the transuranics that is to be removed from the fission waste" Underlining provided.  
See sections 51-56 of the 9/47/09 Response.*

Application/Control Number: 11/899,209

Page 4

Art Unit: 3663

The examiner disagrees.

Claim 1 recites, "to remove 99.999% of the transuranics from said spent fuel".

Clearly, as presently set forth in the claims, the transuranics are removed from the spent fuel NOT the fission wastes, contrary to applicant's allegation.

Applicant's arguments have been fully considered but they are not persuasive.

The above-cited feature upon which the applicant relies (i.e., transuranic removal from fission wastes) is not recited in rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Additionally, if said unrecited features are considered by the applicant to be critical to his invention, then such omission would amount to a gap between the essential elements. In this case: the claim(s) would be incomplete and would be rejected under 35 U.S.C. 112, second paragraph. See MPEP § 2172.01.

5. The instant application is a continuation-in-part of application No. 10/736,858 (now abandoned). In this regard, the following provisions of MPEP 201.1 1.1.B apply:

"Any claim in a continuation-in-part application which is directed solely to subject matter adequately disclosed under 35 U.S.C. 112 in the parent nonprovisional application is entitled to the benefit of the filing date of the parent nonprovisional application. However, if a claim in a continuation-in-part application recites a feature which was not disclosed or adequately supported by a proper disclosure under 35 U.S.C. 112 in the parent nonprovisional application, but which was first introduced or adequately supported in the continuation-in-part application, such a claim is entitled only to the filing date of the continuation-in-part application; *In re Chu*, 66 F.3d 292, 36 USPQ2d 1089 (Fed. Cir. 1995); *Transco Products, Inc. v. Performance Contracting Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994); *In re Van Lagenhoven*, 458 F.2d 132, 136, 173 USPQ 426, 429 (CCPA 1972); and *Chromalloy American Corp. v. Alloy Surfaces Co.*, 339 F. Supp. 859, 874, 173 USPQ 295, 306 (D. Del. 1972)." Underlining provided.

### **Specification**

Application/Control Number: 111899,209

Page 5

Art Unit: 3663

6. The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. The examiner notes that Paragraph 0053 of the Specification incorporates by reference, "LAB-SCALE DEMONSTRATION OF THE UREX +2 PROCESS USING SPENT FUEL," by C. Pereira et al. Additionally, this reference is among the subject matter not disclosed in the parent application 101736,858, and any claims that this reference supports are subject to MPEP 201.11.I.B above. (see section 2 above).

Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no **new** matter. 37 CFR 1.57(f).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-3, 5, 6, 18, and 20-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject

Application/Control Number: 111899,209

Page 6

Art Unit: 3663

matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The reasons are the same as those stated in section 4 of the 6/16/09 Office action, as further clarified in sections 2-4 above, which reasons are herein incorporated.

8. Claims 1-3, 5, 6, 18, and 20-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The reasons are the same as those stated in section 5 of the 6/16/09 Office action, as further clarified in sections 2-4 above, which reasons are herein incorporated.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negative by the manner in which the invention was made.

9. Claims 1-3, 5, 6, 18, 20 and 21-27 rejected under 35 U.S.C. 103(a) as being unpatentable over anyone of, "OCRWM Program Business Plan" (R1), IB92059: Civilian Nuclear Waste Disposal (R2), NEA Issue Brief: An analysis of principal nuclear issues (R3), The United Kingdom's Radioactive Waste Management Program-- Fact Sheet (R4), Canada's Radioactive Waste Management Program --- Fact Sheet (R5), Japan's

Application/Control Number: 11/899,209

Page 7

Art Unit: 3663

Radioactive Waste Management Program — Fact Sheet (R6), Germany's Radioactive Waste Management Program — Fact Sheet (R7), France's Radioactive Waste Management Program — Fact Sheet (R8).

The reasons are the same as those stated in section 6 of the 6/16/09 Office action, as further clarified in sections 2-4 above, which reasons are herein incorporated.

10. Claims 1-3, 5, 6, 18, 20 and 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over anyone of R1-R8 and further in view of either one of U.S. Department of Energy (DOE) Report to Congress, Advance Fuel Cycle Initiative: Status Report for FY 2005, February 2006, or Pereira et al., "LAB-SCALE DEMONSTRATION OF THE UREX +2 PROCESS USING SPENT FUEL," Waste Management '05 Conference, Feb. 27-Mar. 3, 2005.

The reasons are the same as those stated in section 7 of the 6/16/09 Office action, as further clarified in sections 2-4 above, which reasons are herein incorporated.

### ***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a **Erst** reply *is* filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Application/Control Number: 11/899,209

Page 8

Art Unit: 3663

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 571-272-6880. The examiner can normally be reached on 6:00-4:30, Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rick Palabrica/  
Primary Examiner, Art Unit 3663

February 1, 2010