## 504681212 12/11/2017

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
CANADIAN NUCLEAR LABORATORIES LTD. / LABORATOIRES NUCLÉAIRES CANADIENS LTÉE	09/17/2017

#### **RECEIVING PARTY DATA**

Name:	ATOMIC ENERGY OF CANADA LIMITED/ÉNERGIE ATOMIQUE DU CANADA LIMITÉE
Street Address:	CHALK RIVER LABORATORIES
City:	CHALK RIVER
State/Country:	CANADA
Postal Code:	K0J 1J0

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15735374

### **CORRESPONDENCE DATA**

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ATTORNEY DOCKET NUMBER:	21382-P47149US01
NAME OF SUBMITTER:	MATTHEW JOHN GRAFF
SIGNATURE:	/MJG/
DATE SIGNED:	12/11/2017

### **Total Attachments: 5**

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PATENT 504681212 REEL: 044355 FRAME: 0112

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## ASSIGNMENT

WHEREAS WE, James M. King, Andrew B. Kittmer and Terry J. Schaubel, whose full post office addresses are 9 Avon Crescent, P.O. Box 1236, Deep River, K0J 1P0, Ontario, Canada; 51 Parkdale Ave, Deep River, K0J 1P0, Ontario, Canada; and 132 McKee Rd., Deep River, K0J 1P0, Ontario, Canada respectively (hereinafter "the Inventors"), are the inventors an invention entitled Cross-Over Fluid Coupling, for which the following patent applications (hereinafter "said Application(s)") have been filed:

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AND WHEREAS Canadian Nuclear Laboratories Ltd. / Laboratoires Nucléaires Canadians Ltée, a company incorporated under the laws of Canada and having its head office at 1 Plant Road, Chalk River, Ontario, K0J 1J0, Canada (hereinafter "CNL"), has acquired from the Inventors their entire right, title and interest in and to the invention, in all countries of the world, including their rights to the Application and all related applications thereon, including any and all international, national and regional phase applications based on the Application, and other counterpart applications in all countries, and any and all substitutes, divisionals, continuations and continuations-in-part, and any Letters Patent that may be obtained therefor, and in any and all reissues, extensions, renewals and reexaminations of such applications and patents;

AND WHEREAS Atomic Energy Of Canada Limited / Énergie Atomique Du Canada Limitée, a company incorporated under the laws of Canada and having its head office at Chalk River Laboratories, Chalk River, Ontario, K0J 1J0, Canada (hereinafter "AECL"), has acquired from CNL its entire right, title and interest in and to the invention, in all countries of the world, including its rights to the Application and all related applications thereon, including any and all international, national and regional phase applications based on the Application, and other counterpart applications in all

countries, and any and all substitutes, divisionals, continuations and continuations-inpart, and any Letters Patent that may be obtained therefor, and in any and all reissues, extensions, renewals and reexaminations of such applications and patents;

NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of all of which is hereby acknowledged: the Inventors hereby confirm that, as of the filing date of the Application, they have assigned, and, effective as of the filing date of the Application, do hereby sell and assign, transfer and set over to CNL all their right, title and interest for Canada, the United States of America, its territories, dependencies and possessions, and for all other countries in the world, in and to the invention, including their rights to the Application, and all related applications and patents thereon, to be held and enjoyed by CNL, its assigns and successors, as fully and entirely as the same would have been held and enjoyed by them, had this Assignment not been made; and CNL hereby confirms that, as of the filing date of the Application, it has assigned, and, effective as of the filing date of the Application, does hereby sell and assign, transfer and set over to AECL, all its right, title and interest for Canada, the United States of America, its territories, dependencies and possessions, and for all other countries in the world, in and to the invention, including its rights to the Application, and all related applications and patents thereon, to be held and enjoyed by AECL, its assigns and successors, as fully and entirely as the same would have been held and enjoyed by them, had this Assignment not been made.

The Inventors hereby state that they have reviewed and understand the contents of the Application. The Inventors hereby confirm that the Application was made or was authorized to be made by themselves, and that they believe themselves to be the original inventors or joint inventors of a claimed invention in the Application.

The Inventors shall without further consideration do all such things and execute all such documents as may be necessary or desirable to obtain and maintain the Application for the invention, and all related applications and patents thereon, in any

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and all countries, and to vest title thereto in CNL, its successors, assigns and legal representatives or nominees.

The Inventors authorize and empower CNL, its successors, assigns and legal representatives or nominees, to invoke and claim for the Application, and all related applications and patents thereon, filed by them or CNL, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from them.

CNL shall without further consideration do all such things and execute all such documents as may be necessary or desirable to obtain and maintain the Application for the invention, and all related applications and patents thereon, in any and all countries, and to vest title thereto in AECL, its successors, assigns and legal representatives or nominees.

CNL authorize and empower AECL, its successors, assigns and legal representatives or nominees, to invoke and claim for the Application, and all related applications and patents thereon, filed by them or AECL, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from them.

The Inventors, CNL and AECL authorize and empower Bereskin & Parr LLP/S.E.N.C.R.L., s.r.i., whose complete address is Scotia Plaza, 40 King Street West, 40th Floor, Toronto, Ontario, M5H 3Y2, Canada, to insert on this Assignment any further identification, to prepare any translation which may be necessary or desirable in order to comply with the rules for recordation of this document in any country and to correct any clerical error in this Assignment.

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The Commissioner of Patents & Trademarks is hereby authorized and requested to issue any Letters Patent for the Application, and all related applications thereon, to AECL, for its sole use and benefit, and for the use and benefit of its successors and assigns, to the full end of the term for which Letters Patent may be granted, as fully and entirely as the same would have been held by the Inventors had this Assignment and sale not been made.

If a provision of this Assignment is or becomes illegal, invalid or unenforceable in any jurisdiction, that shall not affect the validity or enforceability in that jurisdiction of any other provision of this Assignment, or the validity or enforceability in other jurisdictions of that or any other provision of this Assignment.

The Inventors hereby acknowledge that any willful false statement made in this assignment/declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

The Parties confirm their express wish that this Assignment be drawn up in the English language. Les parties confirment leur volonté expresse que cette cession soit rédigée en langue anglaise.

SIGNED AT Challe Rivers, Contains, this 15 day of July, 2015.

Withess James M. King

SIGNED AT Challe Rivers, Ontains, this 29 day of June, 2015.

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SIGNED AT CHALK ROW	<u>R, Омтаво</u> , this <u>15</u> day of <u>Ју</u> , 2015.
4-11	
Witness	Terry J. Schaubel
SIGNED AT Challe Nove	c, <u>Onterio</u> , this <u>17</u> day of <u>Sydon bir</u> , 2015.
Witness	Canadian Nuclear Laboratories Ltd.+
	Laboratoires Nucléaires Canadiens Ltée
	Name: This is a 7. Chinas or Title: Monogra, IP Operation
SIGNED AT O'T Frank	
THU.	Company of the State of the Sta
Witness	Atomic Energy Of Canada Limited / Énergie
Edding Humit	Atomique Du Canada Limitée
	Name: Grant Gardiner
	Title: YP, Croneral Coursel 4
	Conformate Secretary