PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Emmanuel Coste	08/06/2013
John Richard Tulett	08/05/2013
Hiroshi Nomura	08/12/2013
James Edward Martin	08/12/2013

RECEIVING PARTY DATA

Name:	Schlumberger Technology Corporation		
Street Address:	200 Gillingham Lane, MD1		
City:	Sugar Land		
State/Country:	TEXAS		
Postal Code:	77478		

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	12048201	

CORRESPONDENCE DATA

Fax Number: 7136896372

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 81427595321

Email: kawashima1@exchange.slb.com

Correspondent Name: Schlumberger - COE

Address Line 1: WesternGeco 10001 Richmond Ave.

Address Line 2: Room 3028

Address Line 4: Houston, TEXAS 77042

ATTORNEY DOCKET NUMBER:	26.0284USCIP REV-ASSIGNME		
NAME OF SUBMITTER:	Setsuko Kawashima		
Signature:	/Setsuko Kawashima/		

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Date:	08/15/2013
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PATENT REEL: 031022 FRAME: 0391

ASSIGNMENT

WHEREAS, the undersigned inventors hereinafter referred to as the "Inventors" each said Inventor's address being listed below

Emmanuel Coste, a citizen of France, whose post office address is Mogens Thorsens Gate 9, 0264 Oslo, Norway;

John Richard Tulett, a citizen of Canada, whose post office address is 3-16-1 Shinohara, Higashi, Kohoku-ku, Yokohama-shi, Kanagawa-ken 222-0022 Japan;

Hiroshi Nomura, a citizen of Japan, whose post office address is 3-19-8-409 Higashi-Hashimoto, Midori-ku, Sagamihara-shi, Kanagawa-ken 252-0144 Japan;

James Edward Martin, a citizen of the United Kingdom, whose post office address is 5 The Spinney, Cottenham, Cambridge, CB24 8RN, GB

Has/have invented certain new and useful improvements in

Methods and Apparatus of Source Control for Synchronized Firing of Air Gun Arrays with Receivers in a Well Bore in Borehole Seismic

as described and set forth in an application for Letters Patent of the United States of America, filed on March 13, 2008 under Attorney Docket No. 26.0284 US CIP assigned serial # 12/048,201.

WHEREAS each of the undersigned persons warrants that no person other than these undersigned persons are inventors of the above-described invention;

AND WHEREAS, the "COMPANIES", listed in Schedule A, are desirous of acquiring or confirming their acquisition of the entire right, title and interest in and to said invention, inventions or improvements, and in and to said application, and in and to any and all patents, both of the United States and of all foreign countries, that may be obtained therefore as outlined in Schedule A;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, BE IT KNOWN, that the undersigned Inventors, for good and valuable considerations, the receipt and sufficiency of which hereby acknowledge, have sold, assigned, transferred and conveyed, and by this assignment do sell, assign, transfer and convey, unto said COMPANIES, their successors and assigns, the entire right, title and interest throughout the world, in and to the above-described invention, inventions or improvements described or set forth in said application, in any form or embodiment thereof, and in and to said application, and in and to any applications filed in any foreign country based thereon, including the right to file foreign applications under the provisions of any convention or treaty; and in and to any confirmation, divisional, continuation, continuation-in-part, or substitute application which may be filed on said invention, inventions or improvements in the United States or in any foreign country; and in and to any and all patents, certificates, utility models, reissues, extensions, additions or confirmations thereof which may be granted in the United States or in any foreign country upon said invention, inventions or improvements,

1

TO HAVE AND TO HOLD the same to the full end of the term or terms for which any and all such United States and foreign patents and grants may be issued on said invention, inventions or improvements.

AND said Inventors do hereby authorize and request the issuing authority to issue any and all of said United States and foreign patents on said application or applications to said COMPANIES, their successors and assigns, as the assignee of the entire right, title and interest in and to the same, for the sole use and benefit of said COMPANIES, their successors and assigns.

AND said Inventors do hereby covenant and warrant that said Inventors have full right to convey the entire right, title and interest herein assigned free and clear of all licenses, encumbrances and liens whatsoever, and that no said Inventors has executed and will execute any instruments in conflict herewith.

AND said Inventors, for the conditions aforesaid, do hereby covenant and agree to and with the said COMPANIES, their successors and assigns, that each Inventor, his or her executors, administrators, or other personal representatives, shall and will do all lawful acts and things, make all rightful oaths, and make, execute and deliver any and all other instruments in writing, and any and all further applications, papers, powers, affidavits, assignments, disclaimers and other documents, which in the opinion of counsel for said COMPANIES, their successors and assigns, may be required or necessary in this or in any foreign country more effectually to secure to and vest in said COMPANIES, their successors and assigns, the entire right, title and interest in and to said invention, inventions or improvements, application or applications, patents, rights, titles, benefits, privileges, and advantages hereby sold, assigned, confirmed, transferred and conveyed.

Dog-	MONY WHERI	EOF, I have d 201 <u>3</u> .	uly execute	d this Assi	gnmeni	on this _	<u> </u>	_ day of
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					Name	:: Emman	hel Coste-	AND DESCRIPTION OF THE PERSON NAMED IN COLUMN
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Signature		1 201	2					
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Address:	<u> 2558</u>	Romie de 1	Francices					
	345	To Jiazi	n					
		FLANCE	, 					

IN TESTIM	ONY WHEREOF, I have duly execut	ed this Ass	signment on this 5th day of
70000	, 2003		Name: John Richard Tulett
Witnesses:			
Signature	Cue		
Name:	Setsuko Kawashima	Date:	August 5 20/3
Address:	5-3-25 Tamagawa-Gakuen		, , ,
	Machida-shi, Tokyo		
	194-0041 Japan		
Signature	Rina Janaka		Rira Janaka August 5, 2013
Name:	Rira Tanaka	Date:	August 5, 20/3
Address:	3-20-9-313 Nishi-Ikuta, Tama-ku,		O STATE OF THE PARTY OF THE PAR
	Kawasaki-shi, Kanagawa-ken	·····	
	252-020b, Japan R.T.		
	2111-0027		

AV 6v	IONY WHEREOF, I have duly execute <u>ST</u> , 201 <u>3</u> .	d this A	ssignment on this 12-f-1 day of
			Name: Hiroshi Nomura
Witnesses:			
Signature	know		
Name:	Setsuko Kawashima	Date:	August 12 20/3
Address:	5-3-25 Tamagawa-Gakuen		1,07
	Machida-shi, Tokyo	_	
	194-0041 Japan		
Signature	Rina Janaka		
Name:	Rira Tanaka	Date:	August 12, 20/3
Address:	3-20-9-313 Nishi-Ikuta, Tama-ku,		
	Kawasaki-shi, Kanagawa-ken		
	014 0000 Y		

IN LESTIN	IONY WHEREOF, I have duly executed	this As	signment on this 17 day of
Avous	} , 201 <u>3</u> .		
			I G Matin
	•		Name: James Edward Martin
Witnesses:			
Signature	O Danier		12th August 2013
Name:	Place Sme	Date:	
Address:	20 Monorch Close		
	14aver_11		
	SUFFOIN COOP 99W		
Signature	PAF Clust		12 August 2013
Name:	PHILIP A.F. CHRISTIE	Date:	
Address:	TEAL COTTAGE	-	
	FEN DILAYTON	-	
	CAMBS, CBZ4 4SH	-	

SCHEDULE A "COMPANIES"

SCHLUMBERGER TECHNOLOGY CORPORATION

Corporation of: United States of America

Located at: 200 Gillingham Lane, MD1, Sugar Land, Texas 77478 USA

Assignee for applications in: United States of America

SCHLUMBERGER CANADA LIMITED

Corporation of: Canada

<u>Located at:</u> 525-3rd Avenue S.W., Calgary, Alberta, Canada T2P 0G4

<u>Assignee for applications in:</u> Canada

SERVICES PETROLIERS SCHLUMBERGER

Corporation of: France
Located at: 42 rue Saint Dominique, 75007 Paris, France
Assignee for applications in: France

SCHLUMBERGER HOLDINGS LIMITED

Corporation of: British Virgin Islands
Located at: P.O. Box 71, Craigmuir Chambers, Road Town, 1110 Tortola, British Virgin Islands
Assignee for applications in: Japan, The Netherlands, United Kingdom

SCHLUMBERGER TECHNOLOGY B.V.

Corporation of: the Netherlands
Located at: Parkstraat 83-89, 2514 JG The Hague, The Netherlands
Assignee for applications in: GCC and all other countries.

PRAD RESEARCH AND DEVELOPMENT LIMITED

Corporation of: British Virgin Islands

Located at: P.O. Box 71, Craigmuir Chambers, Road Town, 1110 Tortola, British Virgin Islands

Assignee for applications in: Angola, Bahrain, Bangladesh, Benin, Cambodia, Cameroon, Chad, China, Congo, Gabon, Ghana, Guinea-Bissau, India, Ivory Coast, Jordan, Libya, Mauritania, Morocco, Mozambique, Myanmar, Namibia, Nigeria, Philippines, Senegal, Sudan, Syria, Taiwan, Togo, UAE, Vietnam, Zaire.

7

PATENT REEL: 031022 FRAME: 0398