

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT2578231

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
WILLFIRE HC, LLC	06/27/2013
RECEIVING PARTY DATA	
Name:	TYCO FIRE & SECURITY GMBH
Street Address:	VICTOR VON BRUNS-STRASSE 21
City:	NEUHAUSEN AM RHEINFALL
State/Country:	SWITZERLAND
Postal Code:	8212
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	13216639
CORRESPONDENCE DATA	
Fax Number:	(401)429-0344
Phone:	4017818220
Email:	IPCORRESPONDENCE@TYCOFP.COM
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>	
Correspondent Name:	EFROSYNI IOSIPHIDIS
Address Line 1:	1467 ELMWOOD AVE
Address Line 2:	TYCO FIRE PROTECTION PRODUCTS
Address Line 4:	CRANSTON, RHODE ISLAND 02910
ATTORNEY DOCKET NUMBER:	R-FP-00096/1 US - TFSG
NAME OF SUBMITTER:	EFROSYNI IOSIPHIDIS
Signature:	/EFROSYNI IOSIPHIDIS/
Date:	10/15/2013

CH \$40.00 13216639

**Total Attachments: 23**

source=exhibit c-willfire tfg patent assignment#page1.tif  
source=exhibit c-willfire tfg patent assignment#page2.tif  
source=exhibit c-willfire tfg patent assignment#page3.tif  
source=exhibit c-willfire tfg patent assignment#page4.tif  
source=exhibit c-willfire tfg patent assignment#page5.tif  
source=exhibit c-willfire tfg patent assignment#page6.tif  
source=exhibit c-willfire tfg patent assignment#page7.tif  
source=exhibit c-willfire tfg patent assignment#page8.tif  
source=exhibit c-willfire tfg patent assignment#page9.tif  
source=exhibit c-willfire tfg patent assignment#page10.tif  
source=exhibit c-willfire tfg patent assignment#page11.tif  
source=exhibit c-willfire tfg patent assignment#page12.tif  
source=exhibit c-willfire tfg patent assignment#page13.tif  
source=exhibit c-willfire tfg patent assignment#page14.tif  
source=exhibit c-willfire tfg patent assignment#page15.tif  
source=exhibit c-willfire tfg patent assignment#page16.tif  
source=exhibit c-willfire tfg patent assignment#page17.tif  
source=exhibit c-willfire tfg patent assignment#page18.tif  
source=exhibit c-willfire tfg patent assignment#page19.tif  
source=exhibit c-willfire tfg patent assignment#page20.tif  
source=exhibit c-willfire tfg patent assignment#page21.tif  
source=exhibit c-willfire tfg patent assignment#page22.tif  
source=exhibit c-willfire tfg patent assignment#page23.tif

**EXHIBIT C**  
**ASSIGNMENT OF PATENT RIGHTS**

WillFire HC, LLC (also doing business as Williams Fire & Hazard Control), a U.S corporation with a principal place of business at 204 South Sixth Avenue, Mansfield, Texas 76063, United States of America ("Assignor"), hereby assigns and transfers all of its right, title and interest in the attached patents and patent applications, including all rights of priority and continuation, divisional, reissue, reexamination, renewal, extensions, substitute, and other filings in any country, and including the rights to recover all damages for infringements including damages by reason of past, present, or future infringement or any other violation of patent or patent application rights and the rights to enforce them in relation to infringements occurring before or after the effective date of this assignment, in any country and in any court, and including the right to bring, make, oppose, defend, appeal proceedings, claims or actions in any court anywhere in the world and obtain relief (and to retain any damages recovered) in respect of any infringement, or any other cause of action arising from ownership of any of the attached patents and patent applications (including without limitation all divisional and other filings in any country) whether occurring before, on or after the effective date of this assignment, in consideration of One Dollar (\$1.00), and other good and valuable compensation, the receipt of which is hereby acknowledged, to Tyco Fire & Security GmbH, a Swiss limited liability company registered under the number CH-290.3.017.193-9, whose registered seat is at Victor von Bruns-Strasse 21, 8212 Neuhausen am Rheinfall, Switzerland ("Assignee") and hereby authorizes Assignee to record or have recorded the assignment/transfer of such rights with the relevant patent offices and authorities, including the change of ownership.

**WILLFIRE HC, LLC**

Date: June 27, 2013  
Represented by: [Signature]  
Name: Kevin Coen  
Title: Vice President

**TYCO FIRE & SECURITY GMBH**

Date: June 28, 2013  
Represented by: [Signature]  
Name: James Graham  
Title: Managing Director

**ASSIGNED PATENTS AND PATENT APPLICATIONS:**

CaseNumber	Country	SubCase	CaseType	ApplicationStatus	AppNumber	FileDate	PatNumber	IssDate	AppTitle
R-FP-00090	AE		PCT	Pending	P956/12	15-Mar-2011			Drain nozzle
R-FP-00069	WO		GRD	Converted	PCT/US1996/019691	15-Dec-1996			Method for extinguishing tank fires
R-FP-00097	AO		PCT	Published					Swivel Hydrant Manifold for Industrial Fire Fighting
R-FP-00069	AU		PCT	Granted	14142/97	15-Dec-1996	725407	15-Dec-1996	Method for extinguishing tank fires
R-FP-00073	AU		PCT	Granted	11933/99	21-Oct-1998	745869	21-Oct-1998	IMPROVED DUAL AGENT METHOD FOR EXTINGUISHING FIRE
R-FP-00074	AU	1	PCT	Granted	2600277235	21-Mar-2003	2000277235	08-Oct-2006	THROUGH THE PUMP FOAM SYSTEM
R-FP-00074	AU		PCT	Granted	1998095008	25-Sep-1998	745992	25-Sep-1998	THROUGH THE PUMP FOAM SYSTEM
R-FP-00090	AU		PCT	Pending		15-Mar-2011			Drain nozzle
R-FP-00094	AU		PCT	Published	2011318563	11-Apr-2013			Further Developments - Fixed System
R-FP-00096	AU		PCT	Published	2011318564	11-Apr-2013			Rapid Tank Response, Equipment and Methodology
R-FP-00097	AU		PCT	Published					Swivel Hydrant Manifold for Industrial Fire Fighting
R-FP-00098	AU		PCT	Published	2010250113	18-Mar-2010			APPARATUS AND METHOD FOR PROTECTING STORAGE FIGHTING HOSE COUPLINGS
R-FP-00090	BH		PCT	Pending	2012134	15-Mar-2011			Drain nozzle
R-FP-00072	US		PRO	Expired	60/032990	16-Dec-1996			MIXING PASSAGE IN A FOAM FIRE FIGHTING NOZZLE

R-FP-00088	BR		ORD		Pending	PI0812278-4				Range enhanced fire fighting nozzle and method (center shot)
R-FP-00090	BR		PCT		Pending	BR112012023419-6	15-Mar-2011			Drain nozzle
R-FP-00073	CA		PCT		Abandoned	2309046	20-Apr-2000			IMPROVED DUAL AGENT METHOD FOR EXTINGUISHING FIRE
R-FP-00073	WO		ORD		Converted	PCT/US1998/027288	21-Oct-1998			IMPROVED DUAL AGENT METHOD FOR EXTINGUISHING FIRE
R-FP-00094	BR		PCT		Pending	BR112013009689-6				Further Developments - Fixed System
R-FP-00096	BR		PCT		Pending	BR112013009691-6				Rapid Tank Response, Equipment and Methodology
R-FP-00097	BR		PCT		Published					Swivel Hydrant Manifold for Industrial Fire Fighting
R-FP-00069	CA		PCT		Granted	2277828	22-Jan-1999	2277828		Method for extinguishing tank fires
R-FP-00074	CA	1	PCT		Granted	2423593	26-Mar-2003	2423593		THROUGH THE PUMP FOAM SYSTEM
R-FP-00074	CA		PCT		Granted	2327476	05-Oct-2000	2327476		THROUGH THE PUMP FOAM SYSTEM
R-FP-00086	CA	1	PCT		Published	2577393	16-Feb-2007			Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-FP-00090	CA		PCT		Published	2793092	13-Sep-2012			Drain nozzle

R-FP-00094	CA				Published	2816161	18-Apr-13			FIXED SYSTEMS AND METHODS FOR EXTINGUISHING INDUSTRIAL TANK FIRES, WITH AND WITHOUT FIXED ROOF, INCLUDING AERATED FOAM PROJECTING NOZZLES AND CENTER DIRECTED NOZZLES
R-FP-00096	CA				Published	2815178	18-Apr-13			FOCUSED STREAM, AERATED FOAM PROJECTING NOZZLE INCLUDING FIXED WAND SYSTEM AND METHOD AS WELL AS POSSIBLY PORTABLE CENTER POINTING NOZZLE
R-FP-00097	CA				Published					Swivel Hydrant Manifold for Industrial Fire Fighting
R-FP-00098	CA				Published	2762904	21-Nov-2011			APPARATUS AND METHOD FOR PROTECTING STORZ FIRE FIGHTING HOSE COUPLINGS
R-FP-00074	CN				Granted	CN1998000814104	25-Sep-1998	1306448	01-Aug-2001	THROUGH THE PUMP FOAM SYSTEM
R-FP-00074	CN	1			Abandoned	CN2000000819991	25-Mar-2003	CN1455706T	12-Nov-2003	THROUGH THE PUMP FOAM SYSTEM
R-FP-00090	CN				Published	2.0118E+11	15-Mar-2011			Drain nozzle
R-FP-00094	CN				Published					Further Developments - Fixed System
R-FP-00096	CN				Published					Rapid Tank Response, Equipment and Methodology



R-PP-00069	EP		PCT	Granted	989344301.9	15-Dec-1996	E-P0923404	09-Jan-2004	Method for extinguishing tank fires
R-PP-00073	EP		PCT	Granted	98955034.8	21-Oct-1998	EP1024862	27-Jul-2005	IMPROVED DUAL AGENT METHOD FOR EXTINGUISHING FIRE
R-PP-00074	EP	1	PCT	Granted	2000966067	22-Apr-2003	EP1328933	08-Sep-2010	THROUGH THE PUMP FOAM SYSTEM
R-PP-00074	EP		PCT	Granted	98948538.8	25-Sep-1998	EP1089929	25-Nov-2009	THROUGH THE PUMP FOAM SYSTEM
R-PP-00075	EP		ORD	Published	926684.7	04-Nov-2005			SELECTABLE FIXED FLOW LARGE SCALE FIRE FIGHTING NOZZLE WITH SELECTABLE ADDITIVE PROPORTIONING AND LIGHT WEIGHT COST EFFECTIVE CONSTRUCTION
R-PP-00086	EP	1	ORD	Granted	9165461.E	19-Aug-2004	EP2108407	06-Oct-2010	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-PP-00086	EP		PCT	Granted	4731436.1	19-Aug-2004	EP1660816	24-Mar-2010	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-PP-00088	EP		PCT	Published	8779627.2	28-Mar-2008			Range enhanced fire fighting nozzle and method (center shot)
R-PP-00090	EP		PCT	Published	11756662	15-Mar-2011			Drain nozzle
R-PP-00094	EP		PCT	Pending	11834749.1	17-Oct-2011			Further Developments - Fixed System
R-PP-00096	EP		PCT	Pending	11834750.9	17-Oct-2011			Rapid Tank Response, Equipment and Methodology

R-FP-00097	EP		PCT	Published						Swivel Hydrant Manifold for Industrial Fire Fighting
R-FP-00098	EP		PCT	Published	10778062.1	18-Mai-2010				APPARATUS AND METHOD FOR PROTECTING STORAGE FIGHTING HOSE COUPLINGS
R-FP-00073	ES		EPP	Granted	9895034.8	21-Okt-1998	EP1024852	27-Jul-2005		IMPROVED DUAL AGENT METHOD FOR EXTINGUISHING FIRE THROUGH THE PUMP FOAM SYSTEM
R-FP-00074	ES	1	EPP	Granted	966967.2	27-Sep-2000	EP1328853	08-Sep-2010		THROUGH THE PUMP FOAM SYSTEM
R-FP-00074	ES		EPP	Granted	98948538.8	25-Sep-1998	EP1069929	25-Nov-2009		THROUGH THE PUMP FOAM SYSTEM
R-FP-00086	ES	1	EPC	Granted	9165461.6	19-Aug-2004	EP2108407	06-Okt-2010		Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-FP-00086	ES		EPP	Granted	4781456.1	19-Aug-2004	EP1660816	24-Mir-2010		Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-FP-00074	FR	1	EPP	Granted	966967.2	27-Sep-2000	EP1328853	08-Sep-2010		THROUGH THE PUMP FOAM SYSTEM
R-FP-00076	AU		PCT	Abandoned	59566794	21-Dec-1993				Dual fluid method and apparatus for extinguishing fires
R-FP-00076	NO		PCT	Abandoned	19952518	22-Jun-1995				Dual fluid method and apparatus for extinguishing fires
R-FP-00076	US		ORD	Expired	07/995150	22-Dec-1992	5312041	17-Mai-1994		Dual fluid method and apparatus for extinguishing fires

R-PP-00076	WO			ORIG	Converted	PCT/US1999/012430	21-Dec-1993			Dual fluid method and apparatus for extinguishing fires
R-PP-00083	WO			PRI	Converted	PCT/US1999/21720	14-Oct-1998			Portable wall-attachable fire fighting apparatus and method
R-PP-00085	FR	1		EPC	Granted	9165461.6	19-Aug-2004	EP2108407	06-Oct-2010	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-PP-00086	FR			EPP	Granted	4783456.1	19-Aug-2004	EP1660816	24-Mar-2010	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-PP-00069	GB			EPP	Granted	95944301.9	15-Dec-1996	EP0923404	09-Jan-2004	Method for extinguishing tank fires
R-PP-00073	GB			EPP	Granted	98955094.8	21-Oct-1998	EP1024862	27-Jul-2005	IMPROVED DUAL AGENT METHOD FOR EXTINGUISHING FIRE
R-PP-00074	GB	1		EPP	Granted	966967.2	27-Sep-2000	EP1328353	08-Sep-2010	THROUGH THE PUMP FOAM SYSTEM
R-PP-00074	GB			EPP	Granted	98948538.8	25-Sep-1998	EP1069923	25-Nov-2009	THROUGH THE PUMP FOAM SYSTEM
R-PP-00085	GB	1		EPC	Granted	9165461.6	19-Aug-2004	EP2108407	06-Oct-2010	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-PP-00086	GB	3		PCT	Granted	GB0703173.5	19-Feb-2007	GB2431873	15-Dec-2009	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof

R-PP-00086	GB		EPP	Granted	4751456.1	19-Aug-2004	EP1660816	24-Mar-2010	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-PP-00097	GC		ORD	Pending	19950	10-Dec-2011			Swivel Hydrant Manifold for Industrial Fire fighting
R-PP-00085	GR	1	EPC	Granted	9165461.6	19-Aug-2004	EP2108407	06-Okt-2010	Dry chemical systems for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-PP-00074	IE	1	EPP	Granted	966967.2	27-Sep-2000	EP1328353	08-Sep-2010	THROUGH THE PUMP FOAM SYSTEM
R-PP-00085	IE	1	EPC	Granted	9165461.6	19-Aug-2004	EP2108407	06-Okt-2010	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-PP-00086	CH	1	EPC	Abandoned	9165461.6	19-Aug-2004	EP2108407	06-Okt-2010	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-PP-00086	CY		EPP	Abandoned	4751456.1	19-Aug-2004	EP1660816	24-Mar-2010	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-PP-00086	CY	1	EPC	Abandoned	9165461.6	19-Aug-2004	EP2108407	06-Okt-2010	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-PP-00090	IN		PCT	Pending		15-Mar-2011			Drain nozzle

R-PP-00094	IN		PCT	Published							Further Developments - Fixed System
R-PP-00096	IN		PCT	Published							Rapid Tank Response, Equipment and Methodology
R-PP-00097	IN		PCT	Published							Swivel Hydrant Manifold for Industrial Fire Fighting
R-PP-00074	IT	1	EPP	Granted	986967.2	17-Sep-2000	EP1328353	08-Sep-2010			THROUGH THE PUMP FOAM SYSTEM
R-PP-00086	HU		EPP	Abandoned	4781456.1	19-Aug-2004	EP1560816	24-Mar-2010			Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-PP-00086	HU	1	EPC	Abandoned	9165461.6	19-Aug-2004	EP2108407	06-Oct-2010			Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-PP-00086	IT	1	EPC	Granted	9165461.6	19-Aug-2004	EP2108407	06-Oct-2010			Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-PP-00086	LU		EPP	Abandoned	4781456.1	19-Aug-2004	EP1660816	24-Mar-2010			Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-PP-00086	LU	1	EPC	Abandoned	9165461.6	19-Aug-2004	EP2108407	06-Oct-2010			Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof

R-FP-00086	MC	1	EPC	Abandoned	9165461.6	19-Aug-2004	EP2109407	06-Oct-2010	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-FP-00089	JP		PCT	Granted	JP199805068931	15-Dec-1996	3448303	22-Sep-2003	Method for extinguishing tank fires
R-FP-00074	JP	1	PCT	Granted	2002-530214	27-Sep-2000	4889911	07-Mar-2002	THROUGH THE PUMP FOAM SYSTEM
R-FP-00086	US		PRO	Expired	60/496494	20-Aug-2003			Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-FP-00086	US	1	PRO	Expired	60/538021	21-Jan-2004			Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-FP-00086	WO		PCT	Converted	PCT/US2004/26762	19-Aug-2004			Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-FP-00086	WO	1	PRI	Converted	PCT/US2005/28946	12-Aug-2005			Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-FP-00086	JP	1	DIV	Pending	2011-281160	22-Dec-2011			Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof

R-FP-00086	JP		PCT	Granted	2007-527505	12-Aug-2005	5229939	29-Mar-2013	IMPROVED SYSTEM FOR EXTINGUISHING FLAMMABLE LIQUID FIRE IN AN INDUSTRIAL STORAGE TANK HAVING A ROOF CREATING A SPACE ABOVE THE LIQUID
R-FP-00087	JP		PCT	Granted	2008-525150	02-Aug-2006	5015927	15-Jun-2012	Methods for treating "plunge zone" issues when extinguishing full surface liquid tank fires
R-FP-00084	JP		PCT	Published					Further Developments - Fixed System
R-FP-00095	JP		PCT	Published					Rapid Tank Response, Equipment and Methodology
R-FP-00097	JP		PCT	Published					Swivel Hydrant Manifold for Industrial Fire Fighting
R-FP-00069	MX		PCT	Granted	PA/A/1999/000895	22-Jan-1999	222668	13-Sep-2004	Method for extinguishing tank fires
R-FP-00073	MX		PCT	Granted	PA/a/2000/003907	19-Apr-2000	220259	06-Mar-2004	IMPROVED DUAL AGENT METHOD FOR EXTINGUISHING FIRE THROUGH THE PUMP FOAM SYSTEM
R-FP-00074	MX	1	PCT	Granted	PA/a/2003/002675	27-Mar-2003	285557	10-Mar-2011	THROUGH THE PUMP FOAM SYSTEM
R-FP-0007A	MX		PCT	Granted	PA/a/2000/009783	05-Oct-2000	226892	23-Mar-2005	THROUGH THE PUMP FOAM SYSTEM
R-FP-00084	MX		ORD	Granted	PA/a/2003/004367	16-Mar-2003	243473	25-Jan-2007	Fire fighting method and apparatus deployed after flame collapse for extinguishing "smiley face"
R-FP-00087	WO		ORD	Converted	PCT/US2006/030070	20-Aug-2006			Methods for treating "plunge zone" issues when extinguishing full surface liquid tank fires

R-FP-00086	MX		PCT	Pending	PA/a/2006/001979	17-Feb-2006			Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-FP-00087	MX		PCT	Pending	MX/a/2008/001631	01-Feb-2008			Methods for treating "plunge zone" issues when extinguishing full surface liquid tank fires
R-FP-00088	MX		PCT	Published	MX/a/2009/013036	30-Nov-2009			Range enhanced fire fighting nozzle and method (center shot)
R-FP-00094	MX		PCT	Published					Further Developments - Fixed System
R-FP-00096	MX		PCT	Published					Rapid Tank Response, Equipment and Methodology
R-FP-00097	MX		PCT	Published					Swivel Hydrant Manifold for Industrial Fire Fighting
R-FP-00088	US		PRO	Expired	60/932315	30-Mar-2007			
R-FP-00088	US	1	PRO	Expired	60/961239	19-Jul-2007			Range enhanced fire fighting nozzle and method (center shot)
R-FP-00088	WO		ORD	Converted	PCT/US2008/06739	28-Mar-2008			Range enhanced fire fighting nozzle and method (center shot)
R-FP-00097	NG		PCT	Published					Swivel Hydrant Manifold for Industrial Fire Fighting
R-FP-00074	NL	1	EPP	Granted	968967.2	27-Sep-2000	EP1328353	08-Sep-2010	THROUGH THE PUMP FOAM SYSTEM
R-FP-00086	NL	1	EPC	Granted	9165461.6	19-Aug-2004	EP2108407	06-Oct-2010	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof

R-FP-00086	NL		EPP	Granted	4781456.1	19-AUG-2004	EP1660816	24-MAR-2010	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-FP-00090	OM		PCT	Pending	2012/00186	15-MAR-2011			Drain nozzle
R-FP-00086	PL	1	EPC	Granted	9165461.6	19-AUG-2004	EP2108407	06-OCT-2010	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-FP-00086	PL		EPP	Granted	4781456.1	19-AUG-2004	EP1660816	24-MAR-2010	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-FP-00073	PT		EPP	Granted	98959034.8	21-OCT-1998	EP1024862	27-JUL-2005	IMPROVED DUAL AGENT METHOD FOR EXTINGUISHING FIRE
R-FP-00074	SE	1	EPP	Granted	966967.2	27-SEP-2000	EP1928353	08-SEP-2010	THROUGH THE PUMP FOAM SYSTEM
R-FP-00069	SG		PCT	Granted	931491	15-DEC-1996	61278	22-APR-2002	Method for extinguishing tank fires
R-FP-00090	US		PRO	Expired	61/278877	13-OCT-2009			
R-FP-00090	US	1	PRO	Expired	61/340400	10-MAR-2010			Industrial Floor Nozzle and Fire Fighting System
R-FP-00090	WD		DIRD	Converted	PCT/US2011/00478	15-MAR-2011			Drain nozzle
R-FP-00073	SG		PCT	Granted	Z00002189-9	21-OCT-1998	72430	21-MAR-2002	IMPROVED DUAL AGENT METHOD FOR EXTINGUISHING FIRE
R-FP-00074	SG	1	PCT	Granted	Z00301656-5	27-SEP-2000	95816	30-JUN-2005	THROUGH THE PUMP FOAM SYSTEM

R-PP-00092	AT	EPC	Expired	92302157	12-Mrz-1992	EP0505100	06-Dec-1995	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	AU	ORD	Expired	1992011993	18-Mrz-1992	645942	18-Mrz-1992	Dry powder and liquid method and apparatus for extinguishing fire
R-PP-00092	BE	EPC	Expired	92302157	12-Mrz-1992	EP0505100	06-Dec-1995	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	CA	ORD	Expired	2062864	12-Mrz-1992	2062864	03-Dec-2002	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	CH	EPC	Expired	92302157	12-Mrz-1992	EP0505100	06-Dec-1995	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	DE	EPC	Expired	92302157	12-Mrz-1992	EP0505100	06-Dec-1995	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	DK	EPC	Expired	92302157	12-Mrz-1992	EP0505100	06-Dec-1995	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	EP	ORD	Expired	92302157	12-Mrz-1992	EP0505100	06-Dec-1995	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	ES	EPC	Expired	92302157	12-Mrz-1992	EP0505100	06-Dec-1995	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE

R-PP-00092	FR			EPC	Expired	92302157	12-Mrz-1992	EP0505100	06-Dec-1995	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	GB			EPC	Expired	92302157	12-Mrz-1992	EP0505100	06-Dec-1995	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	GR			EPC	Expired	92302157	12-Mrz-1992	EP0505100	06-Dec-1995	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	IT			EPC	Expired	92302157	12-Mrz-1992	EP0505100	06-Dec-1995	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	JP			ORD	Expired	JP19920092469	10-Mrz-1992	JP3450348 B2	22-Sep-2003	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	LU			EPC	Expired	92302157	12-Mrz-1992	EP0505100	06-Dec-1995	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	ML			EPC	Expired	92302157	12-Mrz-1992	EP0505100	06-Dec-1995	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	MX			ORD	Expired	920001254	20-Mrz-1992	481130	22-Mrz-1996	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	NL			EPC	Expired	92302157	12-Mrz-1992	EP0505100	06-Dec-1995	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE

R-PP-00092	PT		EPC	Expired	92302157	12-Mar-1992	EP0505100	06-Dec-1995	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	SA		ORD	Expired			9202		DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	SE		EPC	Expired	92302157	17-Mar-1992	EP0505100	06-Dec-1995	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	US		ORD	Expired	07/672943	21-Mar-1991	5167285	01-Dec-1992	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00092	US	1	ORD	Expired	989580	19-Mar-1992	5275243	04-Jan-1994	DRY POWDER AND LIQUID METHOD AND APPARATUS FOR EXTINGUISHING FIRE
R-PP-00093	US		PRO	Expired	61/461413	18-Jan-2011			Point and shoot system (including as previously filed,) an ambush system and method and a hollow point system and method, all for fighting industrial tank hazards
R-PP-00085	TR	1	EPC	Granted	9165461.6	19-Aug-2004	EP2108407	06-Oct-2010	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-PP-00085	TR		EPF	Granted	4761456.1	19-Aug-2004	EP1660816	24-Mar-2010	Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof

R-PP-00069	US	1	CIP	Granted	08/585701	23-Jul-1996	5829533	09-Nov-1998	Method for extinguishing tank fires
R-PP-00069	US	2	CIP	Granted	08/735213	21-Oct-1996	5913366	22-Jun-1999	Method for extinguishing tank fires
R-PP-00069	US		ORD	Granted	08/427360	24-Apr-1995	5566766	22-Oct-1996	Method for extinguishing tank fires
R-PP-00070	US		ORD	Granted	08/512965	09-Aug-1995	5779159	14-Jul-1998	Additive fluid peripheral channeling fire fighting nozzle
R-PP-00071	US		ORD	Granted	08/842231	23-Apr-1997	5979564	09-Nov-1999	FLUID ADDITIVE SUPPLY SYSTEM FOR FIRE FIGHTING MECHANISMS
R-PP-00072	US	1	ORD	Granted	2300046	16-Dec-1997	5992529	30-Nov-1999	MIXING PASSAGE IN A FOAM PIPE FIGHTING NOZZLE
R-PP-00094	GC		ORD	Abandoned	19557	19-Oct-2011			Further Developments - Fixed System
R-PP-00094	US	0	PRD	Expired	61/463296	14-Feb-2011			Further Developments - Fixed System
R-PP-00094	WO		ORD	Converted	PCT/US11/01768	19-Oct-2011			Further Developments - Fixed System
R-PP-00073	US		ORD	Granted	08/956854	23-Oct-1997	6065545	23-Mar-2000	IMPROVED DUAL AGENT METHOD FOR EXTINGUISHING FIRE THROUGH THE PUMP FOAM SYSTEM
R-PP-00074	US	1	ORD	Granted	09/096798	12-Jun-1998	6138767	31-Oct-2000	Swivel with or for Hydrant Manifold for industrial fire fighting
R-PP-00095	US		PRD	Expired	61/464628	07-Mar-2011			Fire fighting nozzle and method including pressure regulation, chemical and education features
R-PP-00074	US	2	PCT	Granted	09/204561	15-Apr-1999	6749027	15-Jun-2004	

R-FP-00074	US	3	CIP	Granted	597782	14-Jun-2000	7140552	28-Nov-2006	System for automatic self-proportioning of foam concentrate into fire fighting fluid variable flow conduit
R-FP-00074	US	4	CIP	Granted	09/648351	25-Aug-2000	6659187	09-Dec-2003	THROUGH THE PUMP FOAM SYSTEM
R-FP-00074	US	5	DIV	Granted	10/145341	14-Mai-2002	7048207	23-Mai-2006	Fire fighting nozzle and method including pressure regulation, chemical and reduction features
R-FP-00074	US	6	PCT	Granted	10/380750	18-Aug-2003	7784709	31-Aug-2010	Fire fighting nozzle and method including pressure regulation, chemical and reduction features
R-FP-00074	US	7	CP	Granted	10/677500	02-Oct-2003	7464766	16-Dec-2008	Ranger/hybrid automatic self-metering nozzle, with ratio-selectable and flow meter features
R-FP-00074	US	8	DIV	Granted	11/292776	02-Dec-2005	8002203	23-Aug-2011	Fire fighting nozzle and method including pressure regulation, chemical and reduction features
R-FP-00075	US		ORD	Granted	10/981897	04-Nov-2004	7207391	24-Apr-2007	SELECTABLE FIXED FLOW LARGE SCALE FIRE FIGHTING NOZZLE WITH SELECTABLE ADDITIVE PROPORTIONING AND LIGHT WEIGHT COST EFFECTIVE CONSTRUCTION
R-FP-00096	GC		ORD	Abandoned	19556	19-Oct-2011			Rapid Tank Response, Equipment and Methodology
R-FP-00096	US	0	PRO	Expired	61/455367	19-Oct-2010			Rapid Tank Response, Equipment and Methodology

R-FP-00086	WFO		ORD	Converted	PCT/US11/01769	17-Oct-2011			Rapid Tank Response, Equipment and Methodology
R-FP-00083	US		PCT	Granted	09/569178	11-May-2000	8261843	11-Sep-2012	Dispit Tool - Portable wall-attachable fire fighting apparatus and method
R-FP-00084	US		ORD	Granted	10/47647	16-May-2002	8215412	10-Jul-2012	Fire fighting method and apparatus deployed after flame collapse for extinguishing "smiley face"
R-FP-00085	US		ORD	Granted	10/081419	22-Feb-2002	8033399	11-Oct-2011	Around-the-pump additive system for industrial scale fire hazards
R-FP-00086	US	2	PCT	Published	10/568520	19-Sep-2006			Dry chemical system for extinguishing difficult fuel or flammable liquid fires in a storage tank with a fixed roof
R-FP-00085	US	3	PCT	Published	976965	09-Feb-2007			Extinguishing Flammable Liquid Fire in an Industrial Storage Tank
R-FP-00087	US	1	RCE	Published	1651479	25-Jan-2008			Methods for Treating "Plunge Zone," Heavy Liquid, Large Tank, Structural Impediment and Timing Issues, When Extinguishing Tank Fires
R-FP-00087	US	2	CON	Published	13/507846	02-Aug-2012			Methods for treating "plunge zone" issues when extinguishing full surface liquid tank fires
R-FP-00087	US		ORD	Granted	593578	04-Aug-2005	3424612	23-Apr-2013	Methods for treating "plunge zone" issues when extinguishing full surface liquid tank fires

R-FP-00088	US	2	PCT	Published	12/451687	23-Nov-2009			RANGE ENHANCED FIRE FIGHTING NOZZLE AND METHOD (CENTERSHOT II) Drain nozzle
R-FP-00090	US	2	ORD	Published	2057747	12-Oct-2010			Drain nozzle
R-FP-00090	US	3	PCT	Published	13/261425	05-Sep-2012			Drain nozzle
R-FP-00094	US	1	PCT	Pending	13/261640	16-Apr-2013			Further Developments - Fixed System
R-FP-00096	US	1	PCT	Pending	13/216639	16-Apr-2013			Rapid Tank Response, Equipment and Methodology
R-FP-00097	US	0	PRO	Expired	61/459232	09-Dec-2010			Swivel Hydrant Manifold for Industrial Fire Fighting
R-FP-00097	US	1	PCT	Published					Swivel Hydrant Manifold for Industrial Fire Fighting
R-FP-00098	US	1	PCT	Published	13/261021	18-Mar-2010			APPARATUS AND METHOD FOR PROTECTING STORZ FIRE FIGHTING HOSE COUPLINGS
R-FP-00073	VE		ORD	Pending	1998-002356	23-Oct-1998			IMPROVED DUAL AGENT METHOD FOR EXTINGUISHING FIRE
R-FP-00094	VE		ORD	Published	2011-001373	19-Oct-2011			Further Developments - Fixed System
R-FP-00096	VE		ORD	Published	2013-001372	19-Oct-2011			Rapid Tank Response, Equipment and Methodology
R-FP-00097	WQ		ORD	Published	PCT/US2011/001960	06-Feb-2011			Swivel Hydrant Manifold for Industrial Fire Fighting
R-FP-00097	ZA		PCT	Published					Swivel Hydrant Manifold for Industrial Fire Fighting
R-FP-00098	US		PRO	Expired	61/216916	22-Mar-2009			Swivel Hydrant Manifold for Industrial Fire Fighting

R-PP-00098	WO		ORD	Converted	PCT/US2010/011470	28-May-2010			APPARATUS AND METHOD FOR PROTECTING STORE FIRE FIGHTING HOSE COUPLINGS
R-PP-00099	US		PRO	Expired	60/926937	30-Apr-2007			Swirl Methods for Blanketing a Tank with foam to combat fire or hazard, particularly for alcohols or the like
R-PP-00099	WO		ORD	Expired	PCT/US2008/005520	25-Apr-2008			Swirl Methods for Blanketing a Tank with foam to combat fire or hazard, particularly for alcohols or the like
R-PP-00101	US		PRO	Expired	60/506870	29-Sep-2003			IMPROVED METHOD AND APPARATUS FOR HAZARDOUS VAPOR SUPPRESSION, FIRE PREVENTION AND/OR FIRE EXTINGUISHMENT
R-PP-00101	US	1	PCT	Abandoned	10/572/292	14-Mar-2006			Improved method and apparatus for hazardous vapor suppression fire prevention and/or fire extinguishment
R-PP-00101	WO		ORD	Converted	PCT/US2003/040882	15-Dec-2003			IMPROVED METHOD AND APPARATUS FOR HAZARDOUS VAPOR SUPPRESSION, FIRE PREVENTION AND/OR FIRE EXTINGUISHMENT
R-PP-00102	US		ORD	Abandoned	07/894712	22-Dec-1992			LIQUID AND CHEMICAL METHOD FOR EXTINGUISHING FIRES

R-PP-00102	INO		CORD	Converted	PCT/US1983/012551	21-Dec-1983			LICUID AND CHEMICAL METHOD FOR EXTINGUISHING FIRES
R-PP-00103	US		PRC	Expired	61/510071	16-Mar-2011			Fixed/semi-fixed abated foam systems for industrial tank hazards