

A 2038445



THE UNITED STATES OF AMERICA

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**UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office**

December 12, 2018

**THIS IS TO CERTIFY THAT ANNEXED IS A TRUE COPY FROM THE
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AUGUST 03, 2016.**

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Under Secretary of Commerce for Intellectual Property
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**R GLOVER
Certifying Officer**

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3990079

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
GARY DAVID SHUBINSKY	07/21/2016
JEFFREY DONALD MERWIN	07/18/2016
TAMAS BAN	06/17/2016
ION VERGIL NICOLAESCU	06/20/2016
RECEIVING PARTY DATA	
Name:	HOSPIRA, INC.
Street Address:	275 N. FIELD DRIVE
City:	LAKE FOREST
State/Country:	ILLINOIS
Postal Code:	60045
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	62348301
CORRESPONDENCE DATA	
Fax Number:	(845)602-5848
<i>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.</i>	
Email:	~IPGSNY@PFIZER.COM
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Address Line 1:	235 EAST 42ND STREET
Address Line 2:	LEGAL PATENT DEPT. CHIEF IP COUNSEL
Address Line 4:	NEW YORK, NEW YORK 10017
ATTORNEY DOCKET NUMBER:	PC72309
NAME OF SUBMITTER:	MICHAEL R. CRABB
SIGNATURE:	/MRC Reg. No. 37298/
DATE SIGNED:	08/03/2016
Total Attachments: 6	
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ASSIGNMENT/CONFIRMATORY ASSIGNMENT

For valuable consideration, the receipt and adequacy of which is hereby acknowledged, we, **Gary David Shubinsky, citizen of the United States of America (U.S.A.), resident of 1279 Ranch View Court, Buffalo Grove, IL 60089 U.S.A.; Jeffrey Donald Merwin, citizen of the United States of America (U.S.A.), resident of 14826 W. Mayland Villa, Lincolnshire, IL 60069 U.S.A.; Tamas Ban, citizen of the United States of America (U.S.A.), resident of 34435 N. Bobolink Trail, Grayslake, IL 60030 U.S.A.; and Ion Vergil Nicolaescu, citizen of the United States of America (U.S.A.), resident of 1025 Deer Creek Road, Carpentersville, IL 60110 U.S.A.;** hereby sell, assign and transfer and/or confirm the sale, assignment and transfer unto **Hospira, Inc.,** a corporation organized and existing under the laws of the State of Delaware, United States of America, and having its principal place of business at **275 N. Field Drive, Lake Forest, IL 60045 U.S.A.,** our entire right, title and interest in and to United States Provisional Patent Application Serial No. **62/348,301,** filed **June 10, 2016,** having PFIZER Docket No. **PC72309,** and entitled **ACOUSTIC FLOW SENSOR FOR CONTINUOUS MEDICATION FLOW MEASUREMENTS AND FEEDBACK CONTROL OF INFUSION;** our entire right, title and interest, in all countries of the world, in and to all our inventions, whether joint or sole, disclosed in said Provisional Patent Application; our entire right, title and interest in and to all patent applications filed for Letters Patent for any or all of said inventions; our entire right, title and interest in and to all Letters Patent granted on said patent applications; and the right to claim priority from said Provisional Patent Application under the Paris Convention for the Protection of Industrial Property, and under any and all other such treaties and agreements to which the United States of America is a party and which afford similar priority-claiming privileges, in all countries of the world; and we hereby agree and/or confirm the agreement, whenever requested, to communicate to said Hospira, Inc. and its successors and assigns, any facts known to us respecting said inventions, to testify in any legal proceeding respecting said inventions, and to execute all applications or papers necessary to obtain and maintain proper patent protection on said inventions in all countries of the world.

Signed and witnessed this

at

INSERT City, State, Country here

Gary David Shubinsky

State of Illinois

County of San Diego

Signed and attested before me on

by

(Seal)



(Signature of Notary Public)

Provisional Patent Application Assignment
Attorney Docket No. PC72309
Application Serial No. 62/348,301

Signed and witnessed this 18 day of July 2016,

at Northbrook IL USA
INSERT City, State, Country here

Jeffrey Donald Merwin
Jeffrey Donald Merwin

State of Illinois)
County of Cook) SS

Signed and attested before me on 18 July 2016

by CATHERINE ELLIOTT BURGESSON

(Seal)



Catherine Elliott Burgess
(Signature of Notary Public)

Signed and witnessed this 17th day of June 2016,

at Grayslake, IL, USA
INSERT City, State, Country here

Tamas Ban

State of Illinois)
County of Lak) SS

Signed and attested before me on 17th day of June 2016

by Tamas Ban

(Seal)

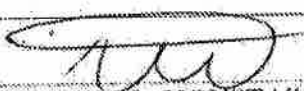
(Signature of Notary Public)



Provisional Patent Application Assignment
Attorney Docket No. PC72309
Application Serial No. 62/348,301

Signed and witnessed this 1st day of August 2016 at

New York, New York, United States of America

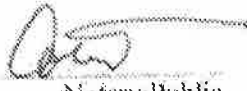

KRISTINA L. KONSTAS

Hospira, Inc.
Attorney-in-Fact
Duly Authorized

ACKNOWLEDGMENT

UNITED STATES OF AMERICA)
STATE OF NEW YORK) SS.:
COUNTY OF NEW YORK)

On this 1st day of August 2016 before me personally came **KRISTINA L. KONSTAS**
to me known and known to me to be an Attorney-in-Fact of Hospira, Inc. and the individual who
executed the foregoing instrument and acknowledged to me that she/he executed the same.


Notary Public

Carol Ann Williams
Notary Public, State of New York
No. 0148274273
Qualified in Bronx County
Certificate Filed in New York County
Commission Expires 12/31/2017

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RECORDED: 08/03/2016

PATENT
REEL: 039321 FRAME: 0973



UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

MARCH 23, 2017

PTAS

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14TH FLOOR
IRVINE, CA 92614

504221562

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT RECORDATION BRANCH OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE ASSIGNMENT RECORDATION BRANCH AT 571-272-3350. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT RECORDATION BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 02/09/2017

REEL/FRAME: 041672/0001
NUMBER OF PAGES: 62

BRIEF: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

DOCKET NUMBER: ICUH.000GEN

ASSIGNOR:
HOSPIRA, INC.

DOC DATE: 02/03/2017

ASSIGNEE:
ICU MEDICAL, INC.
951 CALLE AMANECER
SAN CLEMENTE, CALIFORNIA 92673

APPLICATION NUMBER: 08873471

FILING DATE: 06/12/1997

PATENT NUMBER: 6503221

ISSUE DATE: 01/07/2003

TITLE: TEMPERATURE COMPENSATION SYSTEM FOR REGULATING FLOW THROUGH TUBING IN A PUMP

APPLICATION NUMBER: 08873475

FILING DATE: 06/12/1997

PATENT NUMBER: 6261262

ISSUE DATE: 07/17/2001

TITLE: PUMP WITH ANTI-FREE FLOW FEATURE

APPLICATION NUMBER: 08873662

FILING DATE: 06/12/1997

PATENT NUMBER: 5868712

ISSUE DATE: 02/09/1999

TITLE: PUMP WITH DOOR-MOUNTED MECHANISM FOR POSITIONING TUBING IN THE PUMP HOUSING

APPLICATION NUMBER: 08948137 FILING DATE: 10/09/1997
PATENT NUMBER: 5994876 ISSUE DATE: 11/30/1999
TITLE: BATTERY CAPACITY MEASUREMENT CIRCUIT

APPLICATION NUMBER: 09097062 FILING DATE: 06/12/1998
PATENT NUMBER: 5989222 ISSUE DATE: 11/23/1999
TITLE: PRESSURE (OCCULSION) SENSOR

APPLICATION NUMBER: 09097068 FILING DATE: 06/12/1998
PATENT NUMBER: 6142008 ISSUE DATE: 11/07/2000
TITLE: AIR BUBBLE SENSOR

APPLICATION NUMBER: 09100370 FILING DATE: 06/19/1998
PATENT NUMBER: 6007941 ISSUE DATE: 12/28/1999
TITLE: WATERTIGHT BATTERY COMPARTMENT COVER WITH LATCH ACTUATED O-RING SEAL

APPLICATION NUMBER: 09302710 FILING DATE: 04/30/1999
PATENT NUMBER: 6231320 ISSUE DATE: 05/15/2001
TITLE: DRUG INFUSION PUMPING CASSETTE LATCHING MECHANISM

APPLICATION NUMBER: 09430586 FILING DATE: 10/29/1999
PATENT NUMBER: 6285155 ISSUE DATE: 09/04/2001
TITLE: PSEUDO HALF-STEP MOTOR DRIVE METHOD AND APPARAUS

APPLICATION NUMBER: 09454001 FILING DATE: 12/03/1999
PATENT NUMBER: 6208107 ISSUE DATE: 03/27/2001
TITLE: USE OF DIGITAL CURRENT RAMPING TO REDUCE AUDIBLE NOISE IN STEPPER MOTOR

APPLICATION NUMBER: 09464812 FILING DATE: 12/17/1999
PATENT NUMBER: 6497680 ISSUE DATE: 12/24/2002
TITLE: METHOD FOR COMPENSATING FOR PRESSURE DIFFERENCES ACROSS VALVES IN CASSETTE TYPE IV PUMP

APPLICATION NUMBER: 09628846 FILING DATE: 07/31/2000
PATENT NUMBER: 6685668 ISSUE DATE: 02/03/2004
TITLE: CLOSED-LOOP IV FLUID FLOW CONTROL

APPLICATION NUMBER: 09842529 FILING DATE: 04/25/2001
PATENT NUMBER: 6494694 ISSUE DATE: 12/17/2002
TITLE: DISPOSABLE INFUSION CASSETTE WITH LOW AIR BUBBLE RETENTION AND IMPROVED VALVES

APPLICATION NUMBER: 09880377 FILING DATE: 06/13/2001
PATENT NUMBER: 6767341 ISSUE DATE: 07/27/2004
TITLE: MICRONEEDLES FOR MINIMALLY INVASIVE DRUG DELIVERY

APPLICATION NUMBER: 10115311 FILING DATE: 04/03/2002
PATENT NUMBER: 6869425 ISSUE DATE: 03/22/2005
TITLE: TEMPERATURE COMPENSATION SYSTEM FOR REGULATING FLOW THROUGH TUBING IN A PUMP

APPLICATION NUMBER: 10282967 FILING DATE: 10/29/2002
PATENT NUMBER: 6942636 ISSUE DATE: 09/13/2005
TITLE: METHOD FOR COMPENSATING FOR PRESSURE DIFFERENCES ACROSS VALVES IN CASSETTE TYPE IV PUMP

APPLICATION NUMBER: 10442575
PATENT NUMBER: 6813964
TITLE: FLUID FLOW MEASUREMENT DEVICE

FILING DATE: 05/21/2003
ISSUE DATE: 11/09/2004

APPLICATION NUMBER: 10665776
PATENT NUMBER: 7160087
TITLE: PUMP TUBE SET HANDLING SYSTEM

FILING DATE: 09/19/2003
ISSUE DATE: 01/09/2007

APPLICATION NUMBER: 10667611
PATENT NUMBER: 7258534
TITLE: FLUID DELIVERY DEVICE IDENTIFICATION AND LOADING SYSTEM

FILING DATE: 09/22/2003
ISSUE DATE: 08/21/2007

APPLICATION NUMBER: 10696830
PATENT NUMBER: 7896572
TITLE: MEDICAL DEVICE SYSTEM

FILING DATE: 10/30/2003
ISSUE DATE: 03/01/2011

APPLICATION NUMBER: 10727702
PATENT NUMBER: 6981960
TITLE: CLOSED-LOOP IV FLUID FLOW CONTROL

FILING DATE: 12/04/2003
ISSUE DATE: 01/03/2006

APPLICATION NUMBER: 10767485
PATENT NUMBER: 6980855
TITLE: MICRONEEDLES FOR MINIMALLY INVASIVE DRUG DELIVERY

FILING DATE: 01/29/2004
ISSUE DATE: 12/27/2005

APPLICATION NUMBER: 10783573
PATENT NUMBER:
TITLE: MEDICATION MANAGEMENT SYSTEM

FILING DATE: 02/20/2004
ISSUE DATE:

APPLICATION NUMBER: 10783640
PATENT NUMBER: 9123077
TITLE: MEDICATION MANAGEMENT SYSTEM

FILING DATE: 02/20/2004
ISSUE DATE: 09/01/2015

APPLICATION NUMBER: 10783641
PATENT NUMBER:
TITLE: MEDICATION MANAGEMENT SYSTEM

FILING DATE: 02/20/2004
ISSUE DATE:

APPLICATION NUMBER: 10783642
PATENT NUMBER: 7490021
TITLE: METHOD FOR ADJUSTING PUMP SCREEN BRIGHTNESS

FILING DATE: 02/20/2004
ISSUE DATE: 02/10/2009

APPLICATION NUMBER: 10783648
PATENT NUMBER:
TITLE: MEDICATION MANAGEMENT SYSTEM

FILING DATE: 02/20/2004
ISSUE DATE:

APPLICATION NUMBER: 10783649
PATENT NUMBER:
TITLE: MEDICATION MANAGEMENT SYSTEM

FILING DATE: 02/20/2004
ISSUE DATE:

APPLICATION NUMBER: 10783792
PATENT NUMBER:
TITLE: MEDICATION MANAGEMENT SYSTEM

FILING DATE: 02/20/2004
ISSUE DATE:

APPLICATION NUMBER: 10783877
PATENT NUMBER: 8065161
TITLE: SYSTEM FOR MAINTAINING DRUG INFORMATION AND COMMUNICATING WITH MEDICATION DELIVERY DEVICES

FILING DATE: 02/20/2004
ISSUE DATE: 11/22/2011

APPLICATION NUMBER: 10810123 FILING DATE: 03/26/2004
PATENT NUMBER: 8313308 ISSUE DATE: 11/20/2012
TITLE: MEDICAL INFUSION PUMP WITH CLOSED LOOP STROKE FEEDBACK SYSTEM
AND METHOD

APPLICATION NUMBER: 10823220 FILING DATE: 04/13/2004
PATENT NUMBER: 7556616 ISSUE DATE: 07/07/2009
TITLE: MEDICAL DEVICE SYSTEM

APPLICATION NUMBER: 10930358 FILING DATE: 08/31/2004
PATENT NUMBER: 7895053 ISSUE DATE: 02/22/2011
TITLE: MEDICATION MANAGEMENT SYSTEM

APPLICATION NUMBER: 10978866 FILING DATE: 10/29/2004
PATENT NUMBER: 6964204 ISSUE DATE: 11/15/2005
TITLE: FLUID FLOW MEASUREMENT DEVICE

APPLICATION NUMBER: 11103235 FILING DATE: 04/11/2005
PATENT NUMBER: 7945452 ISSUE DATE: 05/17/2011
TITLE: USER INTERFACE IMPROVEMENTS FOR MEDICAL DEVICES

APPLICATION NUMBER: 11157755 FILING DATE: 06/21/2005
PATENT NUMBER: 7407489 ISSUE DATE: 08/05/2008
TITLE: METHODS FOR COMPENSATING FOR PRESSURE DIFFERENCES ACROSS VALVES
IN IV PUMPS

APPLICATION NUMBER: 11157758 FILING DATE: 06/21/2005
PATENT NUMBER: 7402154 ISSUE DATE: 07/22/2008
TITLE: METHOD FOR COMPENSATING FOR PRESSURE DIFFERENCES ACROSS VALVES
IN CASSETTE TYPE IV PUMP

APPLICATION NUMBER: 11205929 FILING DATE: 08/17/2005
PATENT NUMBER: 7082843 ISSUE DATE: 08/01/2006
TITLE: FLUID FLOW MEASUREMENT DEVICE

APPLICATION NUMBER: 11322675 FILING DATE: 12/30/2005
PATENT NUMBER: 8926562 ISSUE DATE: 01/06/2015
TITLE: SYRINGE HOLDING SYSTEM

APPLICATION NUMBER: 11510106 FILING DATE: 08/25/2006
PATENT NUMBER: 7905710 ISSUE DATE: 03/15/2011
TITLE: SYSTEM AND METHOD FOR IMPROVED LOW FLOW MEDICAL PUMP DELIVERY

APPLICATION NUMBER: 11591965 FILING DATE: 11/02/2006
PATENT NUMBER: 7398183 ISSUE DATE: 07/08/2008
TITLE: MEDICATION MANAGEMENT SYSTEM

APPLICATION NUMBER: 11591970 FILING DATE: 11/02/2006
PATENT NUMBER: 7454314 ISSUE DATE: 11/18/2008
TITLE: MEDICATION MANAGEMENT SYSTEM

APPLICATION NUMBER: 11692630 FILING DATE: 03/28/2007
PATENT NUMBER: ISSUE DATE:
TITLE: MEDICATION ADMINISTRATION AND MANAGEMENT SYSTEM AND METHOD

APPLICATION NUMBER: 11692781 FILING DATE: 03/28/2007
PATENT NUMBER: 8768719 ISSUE DATE: 07/01/2014
TITLE: MEDICATION ADMINISTRATION AND MANAGEMENT SYSTEM AND METHOD

APPLICATION NUMBER: 11692805 FILING DATE: 03/28/2007
PATENT NUMBER: ISSUE DATE:
TITLE: MEDICATION ADMINISTRATION AND MANAGEMENT SYSTEM AND METHOD

APPLICATION NUMBER: 11692831 FILING DATE: 03/28/2007
PATENT NUMBER: 8560345 ISSUE DATE: 10/15/2013
TITLE: MEDICATION ADMINISTRATION AND MANAGEMENT SYSTEM AND METHOD

APPLICATION NUMBER: 11692838 FILING DATE: 03/28/2007
PATENT NUMBER: 8655676 ISSUE DATE: 02/18/2014
TITLE: MEDICATION ADMINISTRATION AND MANAGEMENT SYSTEM AND METHOD

APPLICATION NUMBER: 11692852 FILING DATE: 03/28/2007
PATENT NUMBER: ISSUE DATE:
TITLE: MEDICATION ADMINISTRATION AND MANAGEMENT SYSTEM AND METHOD

APPLICATION NUMBER: 11835798 FILING DATE: 08/08/2007
PATENT NUMBER: 7766630 ISSUE DATE: 08/03/2010
TITLE: FLUID DELIVERY DEVICE IDENTIFICATION AND LOADING SYSTEM

APPLICATION NUMBER: 11835894 FILING DATE: 08/08/2007
PATENT NUMBER: ISSUE DATE:
TITLE: FLUID DELIVERY DEVICE IDENTIFICATION AND LOADING SYSTEM

APPLICATION NUMBER: 11873269 FILING DATE: 10/16/2007
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEM AND METHOD FOR COMPARING AND UTILIZING ACTIVITY
INFORMATION AND CONFIGURATION INFORMATION FROM MULTIPLE DEVICE
MANAGEMENT SYSTEMS

APPLICATION NUMBER: 11959330 FILING DATE: 12/18/2007
PATENT NUMBER: 7896842 ISSUE DATE: 03/01/2011
TITLE: SYSTEM FOR GUIDING A USER DURING PROGRAMMING OF A MEDICAL DEVICE

APPLICATION NUMBER: 12038507 FILING DATE: 02/27/2008
PATENT NUMBER: 8231578 ISSUE DATE: 07/31/2012
TITLE: SYSTEM AND METHOD FOR SEQUENCING CHANNELS IN A MULTI-CHANNEL
INFUSION PUMP

APPLICATION NUMBER: 12194685 FILING DATE: 08/20/2008
PATENT NUMBER: 7981082 ISSUE DATE: 07/19/2011
TITLE: SYSTEM AND METHOD FOR REDUCING AIR BUBBLES IN A FLUID DELIVERY
LINE

APPLICATION NUMBER: 12194819 FILING DATE: 08/20/2008
PATENT NUMBER: 8057437 ISSUE DATE: 11/15/2011
TITLE: RADially SEALING VALVE FOR AN INFUSION SET

APPLICATION NUMBER: 12265470 FILING DATE: 11/05/2008
PATENT NUMBER: 8660860 ISSUE DATE: 02/25/2014
TITLE: SYSTEM AND METHOD FOR SYNCHRONIZING MEDICATION CONFIGURATION
INFORMATION AMONG SYSTEMS CONTAINING MEDICATION CONFIGURATION
INFORMATION

APPLICATION NUMBER: 12335128 FILING DATE: 12/15/2008
PATENT NUMBER: 8403908 ISSUE DATE: 03/26/2013
TITLE: DIFFERENTIAL PRESSURE BASED FLOW SENSOR ASSEMBLY FOR MEDICATION
DELIVERY MONITORING AND METHOD OF USING THE SAME

APPLICATION NUMBER: 12336867 FILING DATE: 12/17/2008
PATENT NUMBER: 9381296 ISSUE DATE: 07/05/2016
TITLE: INFUSION PUMP WITH CONFIGURABLE SCREEN SETTINGS

APPLICATION NUMBER: 12336981 FILING DATE: 12/17/2008
PATENT NUMBER: 9393362 ISSUE DATE: 07/19/2016
TITLE: INFUSION PUMP WITH CONFIGURABLE SCREEN SETTINGS

APPLICATION NUMBER: 12337200 FILING DATE: 12/17/2008
PATENT NUMBER: 8700421 ISSUE DATE: 04/15/2014
TITLE: INFUSION PUMP WITH CONFIGURABLE SCREEN SETTINGS

APPLICATION NUMBER: 12337316 FILING DATE: 12/17/2008
PATENT NUMBER: 8543416 ISSUE DATE: 09/24/2013
TITLE: INFUSION PUMP WITH CONFIGURABLE SCREEN SETTINGS

APPLICATION NUMBER: 12337569 FILING DATE: 12/17/2008
PATENT NUMBER: 9026370 ISSUE DATE: 05/05/2015
TITLE: USER INTERFACE IMPROVEMENTS FOR MEDICAL DEVICES

APPLICATION NUMBER: 12337588 FILING DATE: 12/17/2008
PATENT NUMBER: 8517990 ISSUE DATE: 08/27/2013
TITLE: USER INTERFACE IMPROVEMENTS FOR MEDICAL DEVICES

APPLICATION NUMBER: 12337669 FILING DATE: 12/18/2008
PATENT NUMBER: ISSUE DATE:
TITLE: USER INTERFACE IMPROVEMENTS FOR MEDICAL DEVICES

APPLICATION NUMBER: 12337745 FILING DATE: 12/18/2008
PATENT NUMBER: 8078983 ISSUE DATE: 12/13/2011
TITLE: USER INTERFACE IMPROVEMENTS FOR MEDICAL DEVICES

APPLICATION NUMBER: 12337803 FILING DATE: 12/18/2008
PATENT NUMBER: ISSUE DATE:
TITLE: USER INTERFACE IMPROVEMENTS FOR MEDICAL DEVICES

APPLICATION NUMBER: 12337888 FILING DATE: 12/18/2008
PATENT NUMBER: 8494879 ISSUE DATE: 07/23/2013
TITLE: USER INTERFACE IMPROVEMENTS FOR MEDICAL DEVICES

APPLICATION NUMBER: 12361215 FILING DATE: 01/28/2009
PATENT NUMBER: ISSUE DATE:
TITLE: MEDICATION MANAGEMENT SYSTEM

APPLICATION NUMBER: 12435074 FILING DATE: 05/04/2009
PATENT NUMBER: 8523797 ISSUE DATE: 09/03/2013
TITLE: AUTOMATED POINT-OF-CARE FLUID TESTING DEVICE AND METHOD OF USING
THE SAME

APPLICATION NUMBER: 12468994 FILING DATE: 05/20/2009
PATENT NUMBER: 8065924 ISSUE DATE: 11/29/2011
TITLE: CASSETTE FOR DIFFERENTIAL PRESSURE BASED MEDICATION DELIVERY
FLOW SENSOR ASSEMBLY FOR MEDICATION DELIVERY MONITORING AND
METHOD OF MAKING THE SAME

APPLICATION NUMBER: 12469459 FILING DATE: 05/20/2009
PATENT NUMBER: 7819838 ISSUE DATE: 10/26/2010
TITLE: CASSETTE FOR USE IN A MEDICATION DELIVERY FLOW SENSOR ASSEMBLY
AND METHOD OF MAKING THE SAME

APPLICATION NUMBER: 12469472 FILING DATE: 05/20/2009
PATENT NUMBER: 8048022 ISSUE DATE: 11/01/2011
TITLE: CASSETTE FOR DIFFERENTIAL PRESSURE BASED MEDICATION DELIVERY
FLOW SENSOR ASSEMBLY FOR MEDICATION DELIVERY MONITORING AND
METHOD OF MAKING THE SAME

APPLICATION NUMBER: 12507926 FILING DATE: 07/23/2009
PATENT NUMBER: 8185322 ISSUE DATE: 05/22/2012
TITLE: USER INTERFACE IMPROVEMENTS FOR MEDICAL DEVICES

APPLICATION NUMBER: 12627715 FILING DATE: 11/30/2009
PATENT NUMBER: 8317752 ISSUE DATE: 11/27/2012
TITLE: TOUCH SCREEN SYSTEM AND NAVIGATION AND PROGRAMMING METHODS FOR
AN INFUSION PUMP

APPLICATION NUMBER: 12635897 FILING DATE: 12/11/2009
PATENT NUMBER: 8152486 ISSUE DATE: 04/10/2012
TITLE: FLUID DELIVERY DEVICE IDENTIFICATION AND LOADING SYSTEM

APPLICATION NUMBER: 12639485 FILING DATE: 12/16/2009
PATENT NUMBER: ISSUE DATE:
TITLE: MEDICATION MANAGMENT SYSTEM

APPLICATION NUMBER: 12652140 FILING DATE: 01/05/2010
PATENT NUMBER: 8777895 ISSUE DATE: 07/15/2014
TITLE: SYSTEM AND METHOD FOR AUTHORIZED MEDICATION DELIVERY

APPLICATION NUMBER: 12707774 FILING DATE: 02/18/2010
PATENT NUMBER: 8378837 ISSUE DATE: 02/19/2013
TITLE: OCCLUSION DETECTION SYSTEM

APPLICATION NUMBER: 12761107 FILING DATE: 04/15/2010
PATENT NUMBER: 8271106 ISSUE DATE: 09/18/2012
TITLE: SYSTEM AND METHOD FOR CONFIGURING A RULE SET FOR MEDICAL EVENT
MANAGMENT AND RESPONSES

APPLICATION NUMBER: 12842168 FILING DATE: 07/23/2010
PATENT NUMBER: 8657778 ISSUE DATE: 02/25/2014
TITLE: CASSETTE FOR USE IN A MEDICATION DELIVERY FLOW SENSOR ASSEMBLY
AND METHOD OF MAKING THE SAME

APPLICATION NUMBER: 12862150 FILING DATE: 08/24/2010
PATENT NUMBER: 8317698 ISSUE DATE: 11/27/2012
TITLE: METHOD OF MONITORING AN AUTOMATED POINT-OF-CARE FLUID TESTING
SYSTEM

APPLICATION NUMBER: 12882710 FILING DATE: 09/15/2010
PATENT NUMBER: 8666769 ISSUE DATE: 03/04/2014
TITLE: SYSTEM AND METHOD FOR COMPARING AND UTILIZING ACTIVITY
INFORMATION AND CONFIGURATION INFORMATION FROM MULTIPLE MEDICAL
DEVICE MANAGEMENT SYSTEMS

APPLICATION NUMBER: 12885986 FILING DATE: 09/20/2010
PATENT NUMBER: 8731960 ISSUE DATE: 05/20/2014
TITLE: SYSTEM AND METHOD FOR COMPARING AND UTILIZING ACTIVITY
INFORMATION AND CONFIGURATION INFORMATION FROM MULTIPLE MEDICAL
DEVICE MANAGEMENT SYSTEMS

APPLICATION NUMBER: 12886122 FILING DATE: 09/20/2010
PATENT NUMBER: 8799012 ISSUE DATE: 08/05/2014
TITLE: SYSTEM AND METHOD FOR COMPARING AND UTILIZING ACTIVITY
INFORMATION AND CONFIGURATION INFORMATION FROM MULTIPLE MEDICAL
DEVICE MANAGEMENT SYSTEMS

APPLICATION NUMBER: 12903704 FILING DATE: 10/13/2010
PATENT NUMBER: 8256984 ISSUE DATE: 09/04/2012
TITLE: MEDICAL DEVICE SYSTEM

APPLICATION NUMBER: 12970777 FILING DATE: 12/16/2010
PATENT NUMBER: 8771251 ISSUE DATE: 07/08/2014
TITLE: SYSTEMS AND METHODS FOR MANAGING AND DELIVERING PATIENT THERAPY
THROUGH ELECTRONIC DRUG DELIVERY SYSTEMS

APPLICATION NUMBER: 13107507 FILING DATE: 05/13/2011
PATENT NUMBER: 8577692 ISSUE DATE: 11/05/2013
TITLE: USER INTERFACE IMPROVEMENTS FOR MEDICAL DEVICES

APPLICATION NUMBER: 13154674 FILING DATE: 06/07/2011
PATENT NUMBER: 8361021 ISSUE DATE: 01/29/2013
TITLE: SYSTEM FOR REDUCING AIR BUBBLES IN A FLUID DELIVERY LINE

APPLICATION NUMBER: 13165490 FILING DATE: 06/21/2011
PATENT NUMBER: 8858185 ISSUE DATE: 10/14/2014
TITLE: FLUID FLOW RATE COMPENSATION SYSTEM USING AN INTEGRATED
CONDUCTIVITY SENSOR TO MONITOR TUBING CHANGES

APPLICATION NUMBER: 13196215 FILING DATE: 08/02/2011
PATENT NUMBER: 8857269 ISSUE DATE: 10/14/2014
TITLE: METHOD OF VARYING THE FLOW RATE OF FLUID FROM A MEDICAL PUMP AND
HYBRID SENSOR SYSTEM PERFORMING THE SAME

APPLICATION NUMBER: 13290254 FILING DATE: 11/07/2011
PATENT NUMBER: 8662388 ISSUE DATE: 03/04/2014
TITLE: MEDICAL IDENTIFICATION SYSTEM AND METHOD OF IDENTIFYING
INDIVIDUALS, MEDICAL ITEMS, AND ASSOCIATIONS THEREBETWEEN USING
SAME

APPLICATION NUMBER: 13301493 FILING DATE: 11/21/2011
PATENT NUMBER: 8380536 ISSUE DATE: 02/19/2013
TITLE: SYSTEM FOR MAINTAINING DRUG INFORMATION AND COMMUNICATING WITH
MEDICATION DELIVERY DEVICES

APPLICATION NUMBER: 13301518 FILING DATE: 11/21/2011
PATENT NUMBER: 9572923 ISSUE DATE: 02/21/2017
TITLE: SYSTEM FOR MAINTAINING DRUG INFORMATION AND COMMUNICATING WITH
MEDICATION DELIVERY DEVICES

APPLICATION NUMBER: 13333228 FILING DATE: 12/21/2011
PATENT NUMBER: 8777590 ISSUE DATE: 07/15/2014
TITLE: FLUID DELIVERY DEVICE IDENTIFICATION AND LOADING SYSTEM

APPLICATION NUMBER: 13358609 FILING DATE: 01/26/2012
PATENT NUMBER: 8864670 ISSUE DATE: 10/21/2014
TITLE: ULTRASONIC MONITORING DEVICE FOR MEASURING PHYSIOLOGICAL
PARAMETERS OF A MAMMAL

APPLICATION NUMBER: 13539606 FILING DATE: 07/02/2012
PATENT NUMBER: 8591491 ISSUE DATE: 11/26/2013
TITLE: FLOW STOP PROTECTIVE MEANS FOR A FLUID DELIVERY DEVICE OF A
MEDICAL PUMP

APPLICATION NUMBER: 13552868 FILING DATE: 07/19/2012
PATENT NUMBER: ISSUE DATE:
TITLE: AUTOMATED BLOOD SAMPLING SYSTEM AND METHOD

APPLICATION NUMBER: 13586615 FILING DATE: 08/15/2012
PATENT NUMBER: 9604000 ISSUE DATE: 03/28/2017
TITLE: SYSTEM AND METHOD FOR CONFIGURING A RULE SET FOR MEDICAL EVENT
MANAGEMENT AND RESPONSES

APPLICATION NUMBER: 13588026 FILING DATE: 08/17/2012
PATENT NUMBER: 9240002 ISSUE DATE: 01/19/2016
TITLE: SYSTEMS AND METHODS FOR A GRAPHICAL INTERFACE INCLUDING A
GRAPHICAL REPRESENTATION OF MEDICAL DATA

APPLICATION NUMBER: 13588049 FILING DATE: 08/17/2012
PATENT NUMBER: 9114217 ISSUE DATE: 08/25/2015
TITLE: PATTERN RECOGNITION SYSTEM AND METHOD FOR THE DETECTION OF STUCK
FLUID DROPLETS IN A FLUID DELIVERY LINE OF AN INFUSION SYSTEM

APPLICATION NUMBER: 13630031 FILING DATE: 09/28/2012
PATENT NUMBER: 9498583 ISSUE DATE: 11/22/2016
TITLE: FROTH DETECTION SYSTEM AND METHOD

APPLICATION NUMBER: 13631339 FILING DATE: 09/28/2012
PATENT NUMBER: 9134735 ISSUE DATE: 09/15/2015
TITLE: INTRAVENOUS FLOW RATE CONTROLLER

APPLICATION NUMBER: 13631422 FILING DATE: 09/28/2012
PATENT NUMBER: 9134736 ISSUE DATE: 09/15/2015
TITLE: INTRAVENOUS FLOW RATE CONTROLLER

APPLICATION NUMBER: 13655690 FILING DATE: 10/19/2012
PATENT NUMBER: 9594875 ISSUE DATE: 03/14/2017
TITLE: MEDICAL DEVICE UPDATE SYSTEM

APPLICATION NUMBER: 13714545 FILING DATE: 12/14/2012
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEM FOR MONITORING AND DELIVERING MEDICATION TO A PATIENT AND
METHOD OF USING THE SAME TO MINIMIZE THE RISKS ASSOCIATED WITH
AUTOMATED THERAPY

APPLICATION NUMBER: 13850126 FILING DATE: 03/25/2013
PATENT NUMBER: 9272089 ISSUE DATE: 03/01/2016
TITLE: DIFFERENTIAL PRESSURE BASED FLOW SENSOR ASSEMBLY FOR MEDICATION
DELIVERY MONITORING AND METHOD OF USING THE SAME

APPLICATION NUMBER: 13851207 FILING DATE: 03/27/2013
PATENT NUMBER: ISSUE DATE:
TITLE: AIR DETECTION SYSTEM AND METHOD FOR DETECTING AIR IN A PUMP OF
AN INFUSION SYSTEM

APPLICATION NUMBER: 13955121 FILING DATE: 07/31/2013
PATENT NUMBER: ISSUE DATE:
TITLE: PATIENT CARE SYSTEM FOR CRITICAL MEDICATIONS

APPLICATION NUMBER: 14019745 FILING DATE: 09/06/2013
PATENT NUMBER: 9468718 ISSUE DATE: 10/18/2016
TITLE: MEANS AND METHOD FOR DETECTING FREE FLOW IN AN INFUSION LINE

APPLICATION NUMBER: 14065938 FILING DATE: 10/29/2013
PATENT NUMBER: 8801656 ISSUE DATE: 08/12/2014
TITLE: FLUID FLOW PASSAGE TO IMPROVE AIR-IN-LINE DETECTION

APPLICATION NUMBER: 14067083 FILING DATE: 10/30/2013
PATENT NUMBER: 9468713 ISSUE DATE: 10/18/2016
TITLE: APPARATUS AND METHOD OF MITIGATING FREE FLOW IN A FLUID
ADMINISTRATION SET

APPLICATION NUMBER: 14198807 FILING DATE: 03/06/2014
PATENT NUMBER: ISSUE DATE:
TITLE: MEDICAL DEVICE COMMUNICATION METHOD

APPLICATION NUMBER: 14285797 FILING DATE: 05/23/2014
PATENT NUMBER: ISSUE DATE:
TITLE: MULTI-SENSOR INFUSION SYSTEM FOR DETECTING AIR OR AN OCCLUSION
IN THE INFUSION SYSTEM

APPLICATION NUMBER: 14289796 FILING DATE: 05/29/2014
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION SYSTEM AND METHOD OF USE WHICH PREVENTS OVER-SATURATION
OF AN ANALOG-TO-DIGITAL CONVERTER

APPLICATION NUMBER: 14289848 FILING DATE: 05/29/2014
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION SYSTEM WHICH UTILIZES ONE OR MORE SENSORS AND
ADDITIONAL INFORMATION TO MAKE AN AIR DETERMINATION REGARDING
THE INFUSION SYSTEM

APPLICATION NUMBER: 14472549 FILING DATE: 08/29/2014
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEM AND METHOD OF MONITORING AND MANAGING A REMOTE INFUSION
REGIMEN

APPLICATION NUMBER: 14490450 FILING DATE: 09/18/2014
PATENT NUMBER: ISSUE DATE:
TITLE: FAIL-SAFE DRUG INFUSION THERAPY SYSTEM

APPLICATION NUMBER: 14528907 FILING DATE: 10/30/2014
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEM AND METHOD FOR COMPARING AND UTILIZING ACTIVITY
INFORMATION AND CONFIGURATION INFORMATION FROM MULTIPLE MEDICAL
DEVICE MANAGEMENT SYSTEMS

APPLICATION NUMBER: 14538339 FILING DATE: 11/11/2014
PATENT NUMBER: ISSUE DATE:
TITLE: THERMAL MANAGEMENT SYSTEM AND METHOD FOR MEDICAL DEVICES

APPLICATION NUMBER: 14538545 FILING DATE: 11/11/2014
PATENT NUMBER: ISSUE DATE:
TITLE: MEDICAL DEVICE SYSTEM PERFORMANCE INDEX

APPLICATION NUMBER: 14547376 FILING DATE: 11/19/2014
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION PUMP AUTOMATION SYSTEM AND METHOD

APPLICATION NUMBER: 14571559 FILING DATE: 12/16/2014
PATENT NUMBER: ISSUE DATE:
TITLE: DOOR MOUNT STABILIZATION SYSTEM FOR AN INFUSION PUMP

APPLICATION NUMBER: 14598846 FILING DATE: 01/16/2015
PATENT NUMBER: 9333291 ISSUE DATE: 05/10/2016
TITLE: INFUSION PUMP BATTERY CAPACITY MANAGEMENT AND BATTERY CHARGE
ALERT SYSTEM AND METHOD

APPLICATION NUMBER: 14633614 FILING DATE: 02/27/2015
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION SYSTEM AND METHOD WHICH UTILIZES DUAL WAVELENGTH
OPTICAL AIR-IN-LINE DETECTION

APPLICATION NUMBER: 14700357 FILING DATE: 04/30/2015
PATENT NUMBER: ISSUE DATE:
TITLE: PATIENT CARE SYSTEM WITH CONDITIONAL ALARM FORWARDING

APPLICATION NUMBER: 14725077 FILING DATE: 05/29/2015
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION SYSTEM AND PUMP WITH CONFIGURABLE CLOSED LOOP DELIVERY
RATE CATCH-UP

APPLICATION NUMBER: 14739840 FILING DATE: 06/15/2015
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEM FOR MONITORING AND DELIVERING MEDICATION TO A PATIENT AND
METHOD OF USING THE SAME TO MINIMIZE THE RISKS ASSOCIATED WITH
AUTOMATED THERAPY

APPLICATION NUMBER: 14755021 FILING DATE: 06/30/2015
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION PUMP ERROR DISPLAY

APPLICATION NUMBER: 14828008 FILING DATE: 08/17/2015
PATENT NUMBER: ISSUE DATE:
TITLE: INTRAVENOUS POLE INTEGRATED POWER, CONTROL, AND COMMUNICATION
SYSTEM AND METHOD FOR AN INFUSION PUMP

APPLICATION NUMBER: 14841008 FILING DATE: 08/31/2015
PATENT NUMBER: ISSUE DATE:
TITLE: MEDICATION MANAGEMENT SYSTEM

APPLICATION NUMBER: 14853198 FILING DATE: 09/14/2015
PATENT NUMBER: 9539383 ISSUE DATE: 01/10/2017
TITLE: SYSTEM AND METHOD THAT MATCHES DELAYED INFUSION AUTO-PROGRAMS
WITH MANUALLY ENTERED INFUSION PROGRAMS AND ANALYZES DIFFERENCES
THEREIN

APPLICATION NUMBER: 14972585 FILING DATE: 12/17/2015
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION SYSTEM WITH CONCURRENT TPN/INSULIN INFUSION

APPLICATION NUMBER: 14973236 FILING DATE: 12/17/2015
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEMS AND METHODS FOR A GRAPHICAL INTERFACE INCLUDING A
GRAPHICAL REPRESENTATION OF MEDICAL DATA

APPLICATION NUMBER: 15057250 FILING DATE: 03/01/2016
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION SYSTEM, DEVICE, AND METHOD HAVING ADVANCED INFUSION
FEATURES

APPLICATION NUMBER: 15164251 FILING DATE: 05/25/2016
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION PUMP SYSTEM AND METHOD WITH MULTIPLE DRUG LIBRARY
EDITOR SOURCE CAPABILITY

APPLICATION NUMBER: 15164277 FILING DATE: 05/25/2016
PATENT NUMBER: ISSUE DATE:
TITLE: DISPOSABLE INFUSION FLUID DELIVERY DEVICE FOR PROGRAMMABLE LARGE
VOLUME DRUG DELIVERY

APPLICATION NUMBER: 15289483 FILING DATE: 10/10/2016
PATENT NUMBER: ISSUE DATE:
TITLE: MEDICAL DEVICE UPDATE SYSTEM

APPLICATION NUMBER: 15511193 FILING DATE:
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2015050128
TITLE: MATCHING DELAYED INFUSION AUTO-PROGRAMS WITH MANUALLY ENTERED
INFUSION PROGRAMS

APPLICATION NUMBER: 29190382 FILING DATE: 09/19/2003
PATENT NUMBER: ISSUE DATE:
TITLE: PUMP

APPLICATION NUMBER: 29190384 FILING DATE: 09/19/2003
PATENT NUMBER: ISSUE DATE:
TITLE: PUMP

APPLICATION NUMBER: 29190393 FILING DATE: 09/19/2003
PATENT NUMBER: ISSUE DATE:
TITLE: PUMP CASSETTE

APPLICATION NUMBER: 29190577 FILING DATE: 09/23/2003
PATENT NUMBER: ISSUE DATE:
TITLE: PUMP

APPLICATION NUMBER: 29190578 FILING DATE: 09/23/2003
PATENT NUMBER: D500326 ISSUE DATE: 12/28/2004
TITLE: PUMP

APPLICATION NUMBER: 29190630 FILING DATE: 09/24/2003
PATENT NUMBER: ISSUE DATE:
TITLE: PUMP

APPLICATION NUMBER: 29190631 FILING DATE: 09/24/2003
PATENT NUMBER: ISSUE DATE:
TITLE: PUMP

APPLICATION NUMBER: 29198363 FILING DATE: 01/28/2004
PATENT NUMBER: ISSUE DATE:
TITLE: PUMP

APPLICATION NUMBER: 29199537
PATENT NUMBER: D504507
TITLE: PUMP CASSETTE

FILING DATE: 02/17/2004
ISSUE DATE: 04/26/2005

APPLICATION NUMBER: 29199636
PATENT NUMBER:
TITLE: PUMP

FILING DATE: 02/18/2004
ISSUE DATE:

APPLICATION NUMBER: 29201365
PATENT NUMBER: D515205
TITLE: PUMP

FILING DATE: 03/15/2004
ISSUE DATE: 02/14/2006

APPLICATION NUMBER: 60509404
PATENT NUMBER:
TITLE: MEDICATION MANAGEMENT SYSTEM

FILING DATE: 10/07/2003
ISSUE DATE:

APPLICATION NUMBER: 60519646
PATENT NUMBER:
TITLE: INFUSION PUMP SYSTEM

FILING DATE: 11/13/2003
ISSUE DATE:

APPLICATION NUMBER: 60527550
PATENT NUMBER:
TITLE: INFUSION PUMP SYSTEM

FILING DATE: 12/05/2003
ISSUE DATE:

APPLICATION NUMBER: 60527583
PATENT NUMBER:
TITLE: MEDICATION MANAGEMENT SYSTEM

FILING DATE: 12/05/2003
ISSUE DATE:

APPLICATION NUMBER: 60786599
PATENT NUMBER:
TITLE: MEDICATION ADMINISTRATION AND MANAGEMENT SYSTEM AND METHOD

FILING DATE: 03/28/2006
ISSUE DATE:

APPLICATION NUMBER: 60851971
PATENT NUMBER:
TITLE: SYSTEM AND METHOD FOR COMPARING AND UTILIZING ACTIVITY
INFORMATION AND CONFIGURATION INFORMATION FROM MULTIPLE MEDICAL
DEVICE MANAGEMENT SYSTEMS

FILING DATE: 10/16/2006
ISSUE DATE:

APPLICATION NUMBER: 60892085
PATENT NUMBER:
TITLE: SYSTEM AND METHOD FOR SEQUENCING CHANNELS IN A MULTI-CHANNEL
INFUSION PUMP

FILING DATE: 02/28/2007
ISSUE DATE:

APPLICATION NUMBER: 60957024
PATENT NUMBER:
TITLE: SYSTEM AND METHOD FOR REDUCING AIR BUBBLES IN A FLUID DELIVERY
LINE

FILING DATE: 08/21/2007
ISSUE DATE:

APPLICATION NUMBER: 60969237
PATENT NUMBER:
TITLE: RADially SEALING VAVLE FOR AN INFUSION SET

FILING DATE: 08/31/2007
ISSUE DATE:

APPLICATION NUMBER: 60986968
PATENT NUMBER:
TITLE: SYSTEM AND METHOD FOR SYNCHRONIZING MEDICATION CONFIGURATION
INFORMATION AMONG SYSTEMS CONTAINING MEDICATION CONFIGURATION
INFORMATION

FILING DATE: 11/09/2007
ISSUE DATE:

APPLICATION NUMBER: 61014298 FILING DATE: 12/17/2007
PATENT NUMBER: ISSUE DATE:
TITLE: DIFFERENTIAL PRESSURE BASED FLOW SENSOR ASSEMBLY FOR MEDICATION
DELIVERY MONITORING AND METHOD OF USING THE SAME

APPLICATION NUMBER: 61014660 FILING DATE: 12/18/2007
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION PUMP WITH CONFIGURABLE SCREEN SETTINGS

APPLICATION NUMBER: 61014677 FILING DATE: 12/18/2007
PATENT NUMBER: ISSUE DATE:
TITLE: USER INTERFACE IMPROVMENTS FOR MEDICAL DEVICES

APPLICATION NUMBER: 61051572 FILING DATE: 05/08/2008
PATENT NUMBER: ISSUE DATE:
TITLE: AUTOMATED POINT-OF-CARE FLUID TESTING DEVICE AND METHOD OF USING
THE SAME

APPLICATION NUMBER: 61055605 FILING DATE: 05/23/2008
PATENT NUMBER: ISSUE DATE:
TITLE: CASSETTE FOR DIFFERENTIAL PRESSURE BASED MEDICATION DELIVERY
FLOW SENSOR ASSEMBLY FOR MEDICATION DELIVERY MONITORING AND
METHOD OF MAKING THE SAME

APPLICATION NUMBER: 61093630 FILING DATE: 09/02/2008
PATENT NUMBER: ISSUE DATE:
TITLE: CASSETTE FOR USE IN A MEDICATION DELIVERY FLOW SENSOR ASSEMBLY
AND METHOD OF MAKING THE SAME

APPLICATION NUMBER: 61142704 FILING DATE: 01/06/2009
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEM AND METHOD FOR AUTHORIZED MEDICATION DELIVERY

APPLICATION NUMBER: 61148786 FILING DATE: 01/30/2009
PATENT NUMBER: ISSUE DATE:
TITLE: CASSETTE FOR DIFFERENTIAL PRESSURE BASED MEDICATION DELIVERY
FLOW SENSOR ASSEMBLY FOR MEDICATION DELIVERY MONITORING AND
METHOD OF MAKING THE SAME

APPLICATION NUMBER: 61154033 FILING DATE: 02/20/2009
PATENT NUMBER: ISSUE DATE:
TITLE: OCCLUSION DETECTION SYSTEM

APPLICATION NUMBER: 61170205 FILING DATE: 04/17/2009
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEM AND METHOD FOR CONFIGURING A RULE SET FOR MEDICAL EVENT
MANAGEMENT AND RESPONSES

APPLICATION NUMBER: 61238284 FILING DATE: 08/31/2009
PATENT NUMBER: ISSUE DATE:
TITLE: METHOD OF MONITORING AN AUTOMATED POINT-OF-CARE FLUID TESTING
SYSTEM

APPLICATION NUMBER: 61287579 FILING DATE: 12/17/2009
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEMS AND METHODS FOR MANAGING AND DELIVERING PATIENT THERAPY
THROUGH ELECTRONIC DRUG DELIVERY SYSTEMS

APPLICATION NUMBER: 61357660 FILING DATE: 06/23/2010
PATENT NUMBER: ISSUE DATE:
TITLE: FLUID FLOW RATE COMPENSATION SYSTEM USING AN INTEGRATED
CONDUCTIVITY SENSOR TO MONITOR TUBING CHANGES

APPLICATION NUMBER: 61370962 FILING DATE: 08/05/2010
PATENT NUMBER: ISSUE DATE:
TITLE: METHOD OF VARYING THE FLOW RATE OF FLUID FROM A MEDICAL PUMP AND
HYBRID SENSOR SYSTEM PERFORMING THE SAME

APPLICATION NUMBER: 61411563 FILING DATE: 11/09/2010
PATENT NUMBER: ISSUE DATE:
TITLE: MEDICAL IDENTIFICATION SYSTEM AND METHOD OF IDENTIFYING
INDIVIDUALS, MEDICAL ITEMS, AND ASSOCIATIONS THEREBETWEEN USING
SAME

APPLICATION NUMBER: 61426348 FILING DATE: 12/22/2010
PATENT NUMBER: ISSUE DATE:
TITLE: FLUID DELIVERY DEVICE IDENTIFICATION AND LOADING SYSTEM

APPLICATION NUMBER: 61437047 FILING DATE: 01/28/2011
PATENT NUMBER: ISSUE DATE:
TITLE: ULTRASONIC MONITORING DEVICE FOR MEASURING PHYSIOLOGICAL
PARAMETERS OF A MAMMAL

APPLICATION NUMBER: 61460766 FILING DATE: 09/30/2011
PATENT NUMBER: ISSUE DATE:
TITLE: FROTH DETECTION SYSTEM AND METHOD

APPLICATION NUMBER: 61503411 FILING DATE: 06/30/2011
PATENT NUMBER: ISSUE DATE:
TITLE: FLOW STOP PROTECTIVE MEANS FOR A FLUID DELIVERY DEVICE OF A
MEDICAL PUMP

APPLICATION NUMBER: 61509783 FILING DATE: 07/20/2011
PATENT NUMBER: ISSUE DATE:
TITLE: AUTOMATED BLOOD SAMPLING SYSTEM AND METHOD

APPLICATION NUMBER: 61525418 FILING DATE: 08/19/2011
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEMS AND METHODS FOR A GRAPHICAL INTERFACE INCLUDING A
GRAPHICAL REPRESENTATION OF MEDICAL DATA

APPLICATION NUMBER: 61525587 FILING DATE: 08/19/2011
PATENT NUMBER: ISSUE DATE:
TITLE: PATTERN RECOGNITION SYSTEM AND METHOD FOR THE DETECTION OF STUCK
FLUID DROPLETS IN A FLUID DELIVERY LINE OF AN INFUSION SYSTEM

APPLICATION NUMBER: 61541709 FILING DATE: 09/30/2011
PATENT NUMBER: ISSUE DATE:
TITLE: INTRAVENOUS FLOW RATE CONTROLLER

APPLICATION NUMBER: 61549826 FILING DATE: 10/21/2011
PATENT NUMBER: ISSUE DATE:
TITLE: MEDICAL DEVICE UPDATE SYSTEM

APPLICATION NUMBER: 61576407 FILING DATE: 12/16/2011
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEM FOR MONITORING AND DELIVERING MEDICATION TO A PATIENT AND
METHOD OF USING THE SAME TO MINIMIZE THE RISKS ASSOCIATED WITH
AUTOMATED THERAPY

APPLICATION NUMBER: 61618129 FILING DATE: 03/30/2012
PATENT NUMBER: ISSUE DATE:
TITLE: AIR DETECTION SYSTEM AND METHOD FOR DETECTING AIR IN A PUMP OF
AN INFUSION SYSTEM

APPLICATION NUMBER: 61677736 FILING DATE: 07/31/2012
PATENT NUMBER: ISSUE DATE:
TITLE: PATIENT CARE SYSTEM FOR CRITICAL MEDICATIONS

APPLICATION NUMBER: 61698636 FILING DATE: 09/08/2012
PATENT NUMBER: ISSUE DATE:
TITLE: MEANS AND METHOD FOR DETECTING FREE FLOW IN AN INFUSION LINE

APPLICATION NUMBER: 61719739 FILING DATE: 10/29/2012
PATENT NUMBER: ISSUE DATE:
TITLE: FLUID FLOW PASSAGE TO IMPROVE AIR-IN-LINE DETECTION

APPLICATION NUMBER: 61720095 FILING DATE: 10/30/2012
PATENT NUMBER: ISSUE DATE:
TITLE: APPARATUS AND METHOD OF MITIGATING FREE FLOW IN A FLUID
ADMINISTRATION SET

APPLICATION NUMBER: 61773647 FILING DATE: 03/06/2013
PATENT NUMBER: ISSUE DATE:
TITLE: MEDICAL DEVICE COMMUNICATION METHOD

APPLICATION NUMBER: 61827111 FILING DATE: 05/24/2013
PATENT NUMBER: ISSUE DATE:
TITLE: MULTI-SENSOR INFUSION SYSTEM FOR DETECTING AIR OR AN OCCLUSION
IN THE INFUSION SYSTEM

APPLICATION NUMBER: 61828408 FILING DATE: 05/29/2013
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION SYSTEM AND METHOD OF USE WHICH PREVENTS OVER-SATURATION
OF AN ANALOG-TO-DIGITAL CONVERTER

APPLICATION NUMBER: 61828522 FILING DATE: 05/29/2013
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION SYSTEM WHICH UTILIZES ONE OR MORE SENSORS AND
ADDITIONAL INFORMATION TO MAKE AN AIR DETERMINATION REGARDING
THE INFUSION SYSTEM

APPLICATION NUMBER: 61872333 FILING DATE: 08/30/2013
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEM AND METHOD OF MONITORING AND MANAGING A REMOTE INFUSION
REGIMEN

APPLICATION NUMBER: 61880656 FILING DATE: 09/20/2013
PATENT NUMBER: ISSUE DATE:
TITLE: FAIL-SAFE DRUG INFUSION THERAPY SYSTEM

APPLICATION NUMBER: 61902495 FILING DATE: 11/11/2013
PATENT NUMBER: ISSUE DATE:
TITLE: THERMAL MANAGEMENT SYSTEM AND METHOD FOR MEDICAL DEVICES

APPLICATION NUMBER: 61902504 FILING DATE: 11/11/2013
PATENT NUMBER: ISSUE DATE:
TITLE: MEDICAL DEVICE SYSTEM PERFORMANCE INDEX

APPLICATION NUMBER: 61906181 FILING DATE: 11/19/2013
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION PUMP AUTOMATION SYSTEM AND METHOD

APPLICATION NUMBER: 61916463 FILING DATE: 12/16/2013
PATENT NUMBER: ISSUE DATE:
TITLE: DOOR MOUNT STABILIZATION SYSTEM FOR AN INFUSION PUMP

APPLICATION NUMBER: 61917239 FILING DATE: 12/17/2013
PATENT NUMBER: ISSUE DATE:
TITLE: DOOR MOUNT STABILIZATION SYSTEM FOR AN INFUSION PUMP

APPLICATION NUMBER: 61928305 FILING DATE: 01/16/2014
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION PUMP BATTERY CAPACITY MANAGEMENT SYSTEM AND METHOD

APPLICATION NUMBER: 61946031 FILING DATE: 02/28/2014
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION SYSTEM AND METHOD WHICH UTILIZES DUAL WAVELENGTH
OPTICAL AIR-IN-LINE DETECTION

APPLICATION NUMBER: 61986562 FILING DATE: 04/30/2014
PATENT NUMBER: ISSUE DATE:
TITLE: PATIENT CARE SYSTEM WITH CONDITIONAL ALARM FORWARDING

APPLICATION NUMBER: 62004688 FILING DATE: 05/29/2014
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION SYSTEM AND PUMP WITH CONFIGURABLE CLOSED LOOP DELIVERY
RATE CATCH-UP

APPLICATION NUMBER: 62012756 FILING DATE: 06/16/2014
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEM FOR MONITORING AND DELIVERING MEDICATION TO A PATIENT AND
METHOD OF USING THE SAME TO MINIMIZE THE RISKS ASSOCIATED WITH
AUTOMATED THERAPY

APPLICATION NUMBER: 62019198 FILING DATE: 06/30/2014
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION PUMP ERROR DISPLAY

APPLICATION NUMBER: 62038684 FILING DATE: 08/18/2014
PATENT NUMBER: ISSUE DATE:
TITLE: INTRAVENOUS POLE INTEGRATED POWER, CONTROL, AND COMMUNICATION
SYSTEM AND METHOD FOR AN INFUSION PUMP

APPLICATION NUMBER: 62050536 FILING DATE: 09/15/2014
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEM AND METHOD THAT MATCHES DELAYED INFUSION AUTO-PROGRAMS
WITH MANUALLY ENTERED INFUSION PROGRAMS AND ANALYZES DIFFERENCES
THEREIN

APPLICATION NUMBER: 62089691 FILING DATE: 12/09/2014
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION PUMP BATTERY CHARGE ALERT SYSTEM

APPLICATION NUMBER: 62094552 FILING DATE: 12/19/2014
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION SYSTEM WITH CONCURRENT TPN/INSULIN INFUSION

APPLICATION NUMBER: 62127076 FILING DATE: 03/02/2015
PATENT NUMBER: ISSUE DATE:
TITLE: UNIQUE PLUM CASSETTE PROGRAMMING FEATURES FOR INFUSION PUMP

APPLICATION NUMBER: 62166381 FILING DATE: 05/26/2015
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION PUMP SYSTEM AND METHOD WITH MULTIPLE DRUG LIBRARY
EDITOR SOURCE CAPABILITY

APPLICATION NUMBER: 62166422 FILING DATE: 05/26/2015
PATENT NUMBER: ISSUE DATE:
TITLE: DISPOSABLE INFUSION FLUID DELIVERY DEVICE FOR PROGRAMMABLE LARGE
VOLUME DRUG DELIVERY

APPLICATION NUMBER: 62319849 FILING DATE: 04/08/2016
PATENT NUMBER: ISSUE DATE:
TITLE: CONTROL OF A DRUG INFUSION DEVICE

APPLICATION NUMBER: 62336191 FILING DATE: 05/13/2016
PATENT NUMBER: ISSUE DATE:
TITLE: INFUSION PUMP SYSTEM AND METHOD WITH COMMON LINE AUTO FLUSH

APPLICATION NUMBER: 62348301 FILING DATE: 06/10/2016
PATENT NUMBER: ISSUE DATE:
TITLE: ACOUSTIC FLOW SENSOR FOR CONTINUOUS MEDICATION FLOW MEASUREMENTS
AND FEEDBACK CONTROL OF INFUSION

APPLICATION NUMBER: 62362299 FILING DATE: 07/14/2016
PATENT NUMBER: ISSUE DATE:
TITLE: MULTI-COMMUNICATION PATH SELECTION AND SECURITY SYSTEM FOR A
MEDICAL DEVICE

APPLICATION NUMBER: FILING DATE: 03/27/2013
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2013034041
TITLE: AIR DETECTION SYSTEM AND METHOD FOR DETECTING AIR IN A PUMP OF
AN INFUSION SYSTEM

APPLICATION NUMBER: FILING DATE: 07/31/2013
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2013052937
TITLE: PATIENT CARE SYSTEM FOR CRITICAL MEDICATIONS

APPLICATION NUMBER: FILING DATE: 10/29/2013
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2013067320
TITLE: FLUID FLOW PASSAGE TO IMPROVE AIR-IN-LINE DETECTION

APPLICATION NUMBER: FILING DATE: 03/06/2014
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2014021335
TITLE: MEDICAL DEVICE COMMUNICATION METHOD

APPLICATION NUMBER: FILING DATE: 05/29/2014
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2014039986
TITLE: INFUSION SYSTEM AND METHOD OF USE WHICH PREVENTS OVER-SATURATION
OF AN ANALOG-TO-DIGITAL CONVERTER

APPLICATION NUMBER: FILING DATE: 05/23/2014
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2014039347
TITLE: MULTI-SENSOR INFUSION SYSTEM FOR DETECTING AIR OR AN OCCLUSION
IN THE INFUSION SYSTEM

APPLICATION NUMBER: FILING DATE: 05/29/2014
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2014040022
TITLE: INFUSION SYSTEM WHICH UTILIZES ONE OR MORE SENSORS AND
ADDITIONAL INFORMATION TO MAKE AN AIR DETERMINATION REGARDING
THE INFUSION SYSTEM

APPLICATION NUMBER: FILING DATE: 08/29/2014
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2014053440
TITLE: SYSTEM AND METHOD OF MONITORING AND MANAGING A REMOTE INFUSION
REGIMEN

APPLICATION NUMBER: FILING DATE: 09/19/2014
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2014056531
TITLE: FAIL-SAFE DRUG INFUSION THERAPY SYSTEM

APPLICATION NUMBER: FILING DATE: 11/19/2014
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2014066379
TITLE: INFUSION PUMP AUTOMATION SYSTEM AND METHOD

APPLICATION NUMBER: FILING DATE: 12/16/2014
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2014070641
TITLE: DOOR MOUNT STABILIZATION SYSTEM FOR AN INFUSION PUMP

APPLICATION NUMBER: FILING DATE: 01/16/2015
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2015011848
TITLE: INFUSION PUMP BATTERY CAPACITY MANAGEMENT AND BATTERY CHARGE
ALERT SYSTEM AND METHOD

APPLICATION NUMBER: FILING DATE: 02/27/2015
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2015018113
TITLE: INFUSION SYSTEM AND METHOD WHICH UTILIZES DUAL WAVELENGTH
OPTICAL AIR-IN-LINE DETECTION

APPLICATION NUMBER: FILING DATE: 04/30/2015
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2015028551
TITLE: PATIENT CARE SYSTEM WITH CONDITIONAL ALARM FORWARDING

APPLICATION NUMBER: FILING DATE: 05/29/2015
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2015033345
TITLE: INFUSION SYSTEM AND PUMP WITH CONFIGURABLE CLOSED LOOP DELIVERY
RATE CATCH-UP

APPLICATION NUMBER: FILING DATE: 08/18/2015
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2015045663
TITLE: INTRAVENOUS POLE INTEGRATED POWER, CONTROL, AND COMMUNICATION
SYSTEM AND METHOD FOR AN INFUSION PUMP

APPLICATION NUMBER: FILING DATE: 06/30/2015
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2015038633
TITLE: INFUSION PUMP ERROR DISPLAY

APPLICATION NUMBER: FILING DATE: 06/16/2015
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2015036058
TITLE: SYSTEM FOR MONITORING AND DELIVERING MEDICATION TO A PATIENT AND
METHOD OF USING THE SAME TO MINIMIZE THE RISKS ASSOCIATED WITH
AUTOMATED THERAPY

APPLICATION NUMBER: FILING DATE: 12/18/2015
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2015066595
TITLE: INFUSION SYSTEM WITH CONCURRENT TPN/INSULIN INFUSION

APPLICATION NUMBER: FILING DATE: 03/02/2016
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2016020355
TITLE: INFUSION SYSTEM, DEVICE, AND METHOD HAVING ADVANCED INFUSION
FEATURES

APPLICATION NUMBER: FILING DATE:
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: IB2016052822
TITLE:

APPLICATION NUMBER: FILING DATE:
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: IB2016052830
TITLE:

APPLICATION NUMBER: FILING DATE: 06/10/1998
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US1998011915
TITLE: PUMP WITH ANTI-FREE FLOW FEATURE

APPLICATION NUMBER: FILING DATE: 06/10/1998
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US1998011919
TITLE: PUMP WITH DOOR-MOUNTED MECHANISM FOR POSITIONING TUBING IN THE
PUMP HOUSING

APPLICATION NUMBER: FILING DATE: 06/10/1998
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US1998011916
TITLE: TEMPERATURE COMPENSATION SYSTEM FOR REGULATING FLOW THROUGH
TUBING IN A PUMP

APPLICATION NUMBER: FILING DATE: 09/30/1998
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US1998020492
TITLE: BATTERY CAPACITY MEASUREMENT CIRCUIT

APPLICATION NUMBER: FILING DATE: 06/11/1999
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US1999013016
TITLE: PRESSURE (OCCLUSION) SENSOR

APPLICATION NUMBER: FILING DATE: 04/06/2000
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2000009245
TITLE: DRUG INFUSION PUMPING CASSETTE LATCHING MECHANISM

APPLICATION NUMBER: FILING DATE: 06/04/1999
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US1999012642
TITLE: AIR BUBBLE SENSOR

APPLICATION NUMBER: FILING DATE: 06/04/1999
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US1999012586
TITLE: WATERTIGHT BATTERY COMPARTMENT COVER WITH LATCH ACTUATED O-RING
SEAL

APPLICATION NUMBER: FILING DATE: 10/13/2000
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2000028503
TITLE: PSEUDO HALF-STEP MOTOR DRIVE METHOD AND APPARATUS

APPLICATION NUMBER: FILING DATE: 12/15/2000
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2000034207
TITLE: METHOD FOR COMPENSATING FOR PRESSURE DIFFERENCES ACROSS VALVES
IN CASSETTE TYPE IV PUMP

APPLICATION NUMBER: FILING DATE: 12/01/2000
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2000032650
TITLE: USE OF DIGITAL CURRENT RAMPING TO REDUCE AUDIBLE NOISE IN
STEPPER MOTOR

APPLICATION NUMBER: FILING DATE: 07/27/2001
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2001023782
TITLE: CLOSED-LOOP IV FLUID FLOW CONTROL

APPLICATION NUMBER: FILING DATE: 03/11/2002
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2002007253
TITLE: DISPOSABLE INFUSION CASSETTE WITH LOW AIR BUBBLE RETENTION AND
IMPROVED VALVES

APPLICATION NUMBER: FILING DATE: 05/22/2002
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2002016323
TITLE: MICRONEEDLES FOR MINIMALLY INVASIVE DRUG DELIVERY

APPLICATION NUMBER: FILING DATE: 05/24/2004
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2004016283
TITLE: FLUID FLOW MEASUREMENT DEVICE

APPLICATION NUMBER: FILING DATE: 09/16/2004
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2004030586
TITLE: FLUID DELIVERY DEVICE IDENTIFICATION AND LOADING SYSTEM

APPLICATION NUMBER: FILING DATE: 09/16/2004
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2004030231
TITLE: PUMP TUBE SET HANDLING SYSTEM

APPLICATION NUMBER: FILING DATE: 10/29/2004
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2004036218
TITLE: MEDICAL DEVICE SYSTEM

APPLICATION NUMBER: FILING DATE: 04/11/2006
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2006013735
TITLE: USER INTERFACE IMPROVEMENTS FOR MEDICAL DEVICES

APPLICATION NUMBER: FILING DATE: 12/15/2008
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2008086824
TITLE: SYSTEM FOR GUIDING A USER DURING PROGRAMMING OF A MEDICAL DEVICE

APPLICATION NUMBER: FILING DATE: 03/23/2005
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2005010010
TITLE: MEDICAL INFUSION PUMP WITH CLOSED LOOP STROKE FEEDBACK SYSTEM
AND METHOD

APPLICATION NUMBER: FILING DATE: 08/23/2007
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2007076636
TITLE: SYSTEM AND METHOD FOR IMPROVED LOW FLOW MEDICAL PUMP DELIVERY

APPLICATION NUMBER: FILING DATE: 10/07/2004
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2004033409
TITLE: MEDICATION MANAGEMENT SYSTEM

APPLICATION NUMBER: FILING DATE: 11/12/2004
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2004037900
TITLE: SYSTEM FOR MAINTAINING DRUG INFORMATION AND COMMUNICATING WITH
MEDICATION DELIVERY DEVICES

APPLICATION NUMBER:
PATENT NUMBER:
PCT NUMBER: US2006048892
TITLE: SYRINGE HOLDING SYSTEM

FILING DATE: 12/21/2006
ISSUE DATE:

APPLICATION NUMBER:
PATENT NUMBER:
PCT NUMBER: US2007007761
TITLE: MEDICATION ADMINISTRATION AND MANAGEMENT SYSTEM AND METHOD

FILING DATE: 03/28/2007
ISSUE DATE:

APPLICATION NUMBER:
PATENT NUMBER:
PCT NUMBER: US2007081549
TITLE: SYSTEM AND METHOD FOR COMPARING AND UTILIZING ACTIVITY
INFORMATION AND CONFIGURATION INFORMATION FROM MULTIPLE DEVICE
MANAGEMENT SYSTEMS

FILING DATE: 10/16/2007
ISSUE DATE:

APPLICATION NUMBER:
PATENT NUMBER:
PCT NUMBER: US2008055265
TITLE: SYSTEM AND METHOD FOR SEQUENCING CHANNELS IN A MULTI-CHANNEL
INFUSION PUMP

FILING DATE: 02/28/2008
ISSUE DATE:

APPLICATION NUMBER:
PATENT NUMBER:
PCT NUMBER: US2008074729
TITLE: RADIALY SEALING VALVE FOR AN INFUSION SET

FILING DATE: 08/29/2008
ISSUE DATE:

APPLICATION NUMBER:
PATENT NUMBER:
PCT NUMBER: US2008073828
TITLE: SYSTEM AND METHOD FOR REDUCING AIR BUBBLES IN A FLUID DELIVERY
LINE

FILING DATE: 08/21/2008
ISSUE DATE:

APPLICATION NUMBER:
PATENT NUMBER:
PCT NUMBER: US2008082581
TITLE: SYSTEM AND METHOD FOR SYNCHRONIZING MEDICATION CONFIGURATION
INFORMATION AMONG SYSTEMS CONTAINING MEDICATION CONFIGURATION
INFORMATION

FILING DATE: 11/06/2008
ISSUE DATE:

APPLICATION NUMBER:
PATENT NUMBER:
PCT NUMBER: US2008087067
TITLE: DIFFERENTIAL PRESSURE BASED FLOW SENSOR ASSEMBLY FOR MEDICATION
DELIVERY MONITORING AND METHOD OF USING THE SAME

FILING DATE: 12/17/2008
ISSUE DATE:

APPLICATION NUMBER:
PATENT NUMBER:
PCT NUMBER: US2008087393
TITLE: INFUSION PUMP WITH CONFIGURABLE SCREEN SETTINGS

FILING DATE: 12/18/2008
ISSUE DATE:

APPLICATION NUMBER:
PATENT NUMBER:
PCT NUMBER: US2008087484
TITLE: USER INTERFACE IMPROVEMENTS FOR MEDICAL DEVICES

FILING DATE: 12/18/2008
ISSUE DATE:

APPLICATION NUMBER: FILING DATE: 05/07/2009
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2009043084
TITLE: AUTOMATED POINT-OF-CARE FLUID TESTING DEVICE AND METHOD OF USING
THE SAME

APPLICATION NUMBER: FILING DATE: 08/27/2010
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2010046901
TITLE: METHOD OF MONITORING AN AUTOMATED POINT-OF-CARE FLUID TESTING
SYSTEM

APPLICATION NUMBER: FILING DATE: 05/21/2009
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2009044827
TITLE: CASSETTE FOR DIFFERENTIAL PRESSURE BASED MEDICATION DELIVERY
FLOW SENSOR ASSEMBLY FOR MEDICATION DELIVERY MONITORING AND
METHOD OF MAKING THE SAME

APPLICATION NUMBER: FILING DATE: 05/21/2009
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2009044841
TITLE: CASSETTE FOR USE IN A MEDICATION DELIVERY FLOW SENSOR ASSEMBLY
AND METHOD OF MAKING THE SAME

APPLICATION NUMBER: FILING DATE: 05/21/2009
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2009044823
TITLE: CASSETTE FOR DIFFERENTIAL PRESSURE BASED MEDICATION DELIVERY
FLOW SENSOR ASSEMBLY FOR MEDICATION DELIVERY MONITORING AND
METHOD OF MAKING THE SAME

APPLICATION NUMBER: FILING DATE: 02/19/2010
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2010024645
TITLE: OCCLUSION DETECTION SYSTEM

APPLICATION NUMBER: FILING DATE: 04/16/2010
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2010031351
TITLE: SYSTEM AND METHOD FOR CONFIGURING A RULE SET FOR MEDICAL EVENT
MANAGMENT AND RESPONSES

APPLICATION NUMBER: FILING DATE: 11/30/2010
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2010058386
TITLE: IMPROVED TOUCH SCREEN SYSTEM AND NAVIGATION AND PROGRAMMING
METHODS FOR AN INFUSION PUMP

APPLICATION NUMBER: FILING DATE: 12/17/2010
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2010061127
TITLE: SYSTEMS FOR MANAGING DRUG DELIVERY DEVICES

APPLICATION NUMBER: FILING DATE: 06/23/2011
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2011041559
TITLE: FLUID FLOW RATE COMPENSATION SYSTEM USING AN INTEGRATED
CONDUCTIVITY SENSOR TO MONITOR TUBING CHANGES

APPLICATION NUMBER: FILING DATE: 08/03/2011
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2011046375
TITLE: METHOD OF VARYING THE FLOW RATE OF FLUID FROM A MEDICAL PUMP AND
HYBRID SENSOR SYSTEM PERFORMING THE SAME

APPLICATION NUMBER: FILING DATE: 11/09/2011
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2011059886
TITLE: MEDICAL IDENTIFICATION SYSTEM AND METHOD OF IDENTIFYING
INDIVIDUALS, MEDICAL ITEMS, AND ASSOCIATIONS THEREBETWEEN USING
SAME

APPLICATION NUMBER: FILING DATE: 12/22/2011
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2011066808
TITLE: FLUID DELIVERY DEVICE IDENTIFICATION AND LOADING SYSTEM

APPLICATION NUMBER: FILING DATE: 01/27/2012
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2012022850
TITLE: ULTRASONIC MONITORING DEVICE FOR MEASURING PHYSIOLOGICAL
PARAMETERS OF A MAMMAL

APPLICATION NUMBER: FILING DATE: 07/02/2012
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2012045198
TITLE: FLOW STOP PROTECTIVE MEANS FOR A FLUID DELIVERY DEVICE OF A
MEDICAL PUMP

APPLICATION NUMBER: FILING DATE: 07/20/2012
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2012047553
TITLE: AUTOMATED BLOOD SAMPLING SYSTEM AND METHOD

APPLICATION NUMBER: FILING DATE: 08/17/2012
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2012051300
TITLE: SYSTEMS AND METHODS FOR A GRAPHICAL INTERFACE INCLUDING A
GRAPHICAL REPRESENTATION OF MEDICAL DATA

APPLICATION NUMBER: FILING DATE: 08/17/2012
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2012051356
TITLE: PATTERN RECOGNITION SYSTEM AND METHOD FOR THE DETECTION OF STUCK
FLUID DROPLETS IN A FLUID DELIVERY LINE OF AN INFUSION SYSTEM

APPLICATION NUMBER: FILING DATE: 09/28/2012
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2012057878
TITLE: FROTH DETECTION SYSTEM AND METHOD

APPLICATION NUMBER: FILING DATE: 09/28/2012
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US2012058072
TITLE: INTRAVENOUS FLOW RATE CONTROLLER

APPLICATION NUMBER:
PATENT NUMBER:
PCT NUMBER: US2012058063
TITLE: INTRAVENOUS FLOW RATE CONTROLLER

FILING DATE: 09/28/2012
ISSUE DATE:

APPLICATION NUMBER:
PATENT NUMBER:
PCT NUMBER: US2012061055
TITLE: MEDICAL DEVICE UPDATE SYSTEM

FILING DATE: 10/19/2012
ISSUE DATE:

APPLICATION NUMBER:
PATENT NUMBER:
PCT NUMBER: US2012069730
TITLE: SYSTEM FOR MONITORING AND DELIVERING MEDICATION TO A PATIENT AND
METHOD OF USING THE SAME TO MINIMIZE THE RISKS ASSOCIATED WITH
AUTOMATED THERAPY

FILING DATE: 12/14/2012
ISSUE DATE:

ASSIGNMENT RECORDATION BRANCH
PUBLIC RECORDS DIVISION

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4268239

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
Name		Execution Date
HOSPIRA, INC.		02/03/2017
RECEIVING PARTY DATA		
Name:	ICU MEDICAL, INC.	
Street Address:	951 CALLE AMANECER	
City:	SAN CLEMENTE	
State/Country:	CALIFORNIA	
Postal Code:	92673	
PROPERTY NUMBERS Total: 296		
Property Type	Number	
Patent Number:	6261262	
Patent Number:	5868712	
Patent Number:	6503221	
Patent Number:	6869425	
Patent Number:	5994876	
Patent Number:	5989222	
Patent Number:	6142008	
Patent Number:	6231320	
Patent Number:	6007941	
Patent Number:	6285155	
Patent Number:	6497680	
Patent Number:	6942636	
Patent Number:	7407489	
Patent Number:	7402154	
Patent Number:	6208107	
Patent Number:	6685668	
Patent Number:	6981960	
Patent Number:	6494694	
Patent Number:	6767341	
Patent Number:	6813964	

PATENT ASSIGNMENT

This Patent Assignment (the “Assignment”) is effective as of February 3, 2017 (the “Effective Date”), by and between Hospira, Inc., a Delaware corporation (“Assignor”) and ICU Medical, Inc., a Delaware corporation (“Assignee”). Assignor and Assignee are sometimes referred to herein individually as a “Party” and collectively as the “Parties.” Capitalized terms used but not defined herein shall have the meaning ascribed to such terms in the Purchase Agreement (as defined herein).

RECITALS:

WHEREAS, Pfizer Inc., a Delaware Corporation (“Seller Parent”) and Assignee are parties to that certain Amended and Restated Stock and Asset Purchase Agreement, dated as of January 5, 2017 (amending and restating that certain Stock and Asset Purchase Agreement dated as of October 6, 2016 between Seller Parent and ICU, and as may be further amended from time to time, the “Purchase Agreement”); and

WHEREAS, pursuant to the Purchase Agreement, Seller Parent sold, conveyed, assigned and transferred to Assignee all of Seller Parent’s right, title and interest in and to the Business Patent Rights, including the patents and patent applications identified on Schedule A (such scheduled patents and patent applications, the “Assigned Patent Rights”), subject to the terms and conditions of the Purchase Agreement;

WHEREAS, pursuant to the Purchase Agreement, Seller Parent and Assignee have agreed to enter into this Assignment; and

WHEREAS, Assignor, a wholly-owned subsidiary of Seller Parent, is the owner of the Assigned Patent Rights as of the Effective Date.

NOW, THEREFORE, in consideration of the foregoing, and including the consideration set forth in the Purchase Agreement, the representations, warranties, covenants and agreements contained herein, and other good and valuable consideration, the adequacy and receipt of which is hereby acknowledged, the Parties hereby agree as follows:

1. **Conveyance.** Assignor hereby sells, assigns, transfers, and conveys to Assignee, and Assignee hereby accepts, Assignor’s entire right, title and interest at Closing in, to and under (a) the Assigned Patent Rights, (b) divisionals, continuations, and continuations-in-part that claim priority to any Assigned Patent Rights, (c) reissues, renewals, reexaminations, substitutions, extensions, or additions of the Assigned Patent Rights, (d) foreign equivalents of the Assigned Patent Rights, (e) rights to apply for, prosecute and obtain patents in respect of any of the inventions in any country of the world, including the right to claim priority from the Assigned Patent Rights under the Paris Convention for the Protection of Industrial Property and under any and all other applicable treaties and agreements which afford similar priority-claiming privileges in all countries of the world, and (f) all rights accruing under, and causes of action and other remedies with respect to, the foregoing, including the right to sue for and to recover damages and other remedies in respect of any past, present or future

infringement or other unauthorized use of the Assigned Patent Rights, provided that, with respect to the foregoing clauses (b) through (e), solely to the extent the claims thereof are entirely supported (in accordance with the laws of the jurisdiction in which such patent was granted and such application is pending) by the Assigned Patent Rights.

2. **Issuance and Recordation.** Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue any and all Assigned Patent Rights to Assignee, its successors and assigns. Assignor hereby requests the Commissioner of Patents and Trademarks of the United States, and the corresponding entities or agencies in any applicable foreign jurisdiction, to record Assignee as the purchaser and owner of the Assigned Patent Rights. Assignee shall have the right to record this Assignment with all applicable governmental authorities and registrars so as to perfect its ownership of the Assigned Patent Rights.
3. **No Modification.** The Parties acknowledge and agree that this Assignment is entered into pursuant to the Purchase Agreement, and nothing contained in this Assignment is intended to or shall be deemed to modify, alter, amend or otherwise change any of the rights or obligations of Assignee or Seller Parent under the Purchase Agreement, and, in the event and to the extent that there is a conflict between the provisions of this Assignment and the provisions of the Purchase Agreement, the Purchase Agreement shall control.
4. **Successors and Assigns.** This Assignment shall inure to the benefit of and be binding upon the Parties and their respective successors and permitted assigns.
5. **Counterparts.** This Assignment may be executed in counterparts (including by facsimile or electronic .pdf submission), each of which shall be deemed an original, and all of which shall constitute one and the same agreement and shall become effective when one or more counterparts have been signed by each of the Parties and delivered (by telecopy or otherwise) to the other Party, it being understood that both Parties need not sign the same counterpart.
6. **Interpretation.** The heading references herein are for convenience purposes only, do not constitute a part of this Assignment and shall not be deemed to limit or affect any of the provisions hereof.
7. **Further Assurances.** Upon Assignee's request and at Assignee's expense, Assignor agrees to provide reasonable cooperation and assistance as is reasonably required by Assignee to effect and register the rights assigned herein (including to execute, acknowledge, and deliver such other documents and take such other actions as may be reasonably required), and, in general, provide reasonable lawful cooperation reasonably requested by Assignee to carry out and fulfill the purposes and intent of this Assignment of the Assigned Patent Rights, in each case, in accordance with and subject to the Purchase Agreement.
8. **Governing Law; Jurisdiction.** This Assignment shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflicts of law rules of such state. With respect to any suit, action or proceeding relating to this Assignment (each, a "Proceeding"), each Party irrevocably (i) agrees and consents to be subject to the jurisdiction of the United States District Court for the Southern District of New York or, if for any reason the United States District Court for the Southern District of New York lacks subject matter jurisdiction, any New York State court sitting in New York City and (ii)

waives any objection which it may have at any time to the laying of venue of any Proceeding brought in any such court, waives any claim that such Proceeding has been brought in an inconvenient forum and further waives the right to object, with respect to such Proceeding, that such court does not have any jurisdiction over such Party. THE PARTIES HEREBY AGREE THAT MAILING OF PROCESS OR OTHER PAPERS IN CONNECTION WITH ANY SUCH ACTION OR PROCEEDING IN THE MANNER PROVIDED IN SECTION 10.1 OF THE PURCHASE AGREEMENT, OR IN SUCH OTHER MANNER AS MAY BE PERMITTED BY LAW, SHALL BE VALID AND SUFFICIENT SERVICE THEREOF AND HEREBY WAIVE ANY OBJECTIONS TO SERVICE ACCOMPLISHED IN THE MANNER HEREIN PROVIDED.

[Signature page follows]

IN WITNESS WHEREOF, the Parties have executed or caused this Assignment to be executed by their duly authorized representatives as of the Effective Date.

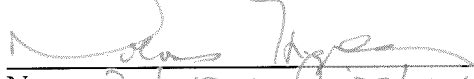
HOSPIRA, INC.


Name: Colum Lane
Title: Vice president

Witness:


Name: Brian Byala
Date: 2-3-2017

Witness:


Name: Dolores Hippler
Date: 2-3-2017

STATE OF New York)
COUNTY OF New York)SS.

This instrument was executed before me on this 3rd day of February, 2012, by Colum Lane, the Vice President (title) of HOSPIRA, INC., a corporation organized under the laws of Delaware, on behalf of said corporation.


Notary Public in and for
The State of New York
Sean F. Kelley
Printed or Typed Name of Notary

My commission expires 12-9-2017

SEAN F. KELLEY
Notary Public, State of New York
No. 01KE6293500
Qualified in New York County
Commission Expires 12/09/2017

ICU MEDICAL, INC.



Name: Scott E. Lamb
Title: Chief Financial Officer and
Treasurer

Name: Lisa Harper
Date: February 3, 2017

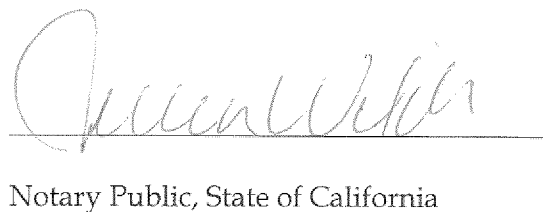
Name: Steve Riggs
Date: February 3, 2017

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss

Subscribed and sworn to (or affirmed) before me on this 3rd day of February, 2017, by Scott Lamb, proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

Notary Seal:



SCHEDULE A
ASSIGNED PATENT RIGHTS

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
United States	Pump With Anti-Free Flow Feature	08/873475	06/12/1997	6261262	07/17/2001
United States	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	08/873662	06/12/1997	5868712	02/09/1999
United States	Temperature Compensation System For Regulating Flow Through Tubing In A Pump	08/873471	06/12/1997	6503221	01/07/2003
United States	Temperature Compensation System For Regulating Flow Through Tubing In A Pump	10/115311	04/03/2002	6869425	03/22/2005
United States	Battery Capacity Measurement Circuit	08/948137	10/09/1997	5994876	11/30/1999
United States	Pressure (Occlusion) Sensor	09/097062	06/12/1998	5989222	11/23/1999
United States	Air Bubble Sensor	09/097068	06/12/1998	6142008	11/07/2000
United States	Air Bubble Sensor	09/302710	04/30/1999	6231320	05/15/2001
United States	Watertight Battery Compartment Cover With Latch Actuated O-Ring Seal	09/100370	06/19/1998	6007941	12/28/1999
United States	Pseudo Half-Step Motor Drive Method And Apparatus	09/430586	10/29/1999	6285155	09/04/2001
United States	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	09/464812	12/17/1999	6497680	12/24/2002
Australia	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	2001021084	12/15/2000	778557	04/07/2005
Canada	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	2649867	12/15/2000	2649867	06/01/2010
European Patent Convention	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	00984470.5	12/15/2000	1237595	11/09/2005

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
European Patent Convention	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	05108082.8	12/15/2000	1611909	07/08/2009
France	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	05108082.8	12/15/2000	1611909	07/08/2009
Germany	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	05108082.8	12/15/2000	60042530.4	07/08/2009
Great Britain	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	05108082.8	12/15/2000	1611909	07/08/2009
Italy	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	502009901771395	12/15/2000	1611909	07/08/2009
Spain	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	05108082.8	12/15/2000	1611909	07/08/2009
United States	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	10/282967	10/29/2002	6942636	09/13/2005
United States	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	11/157755	06/21/2005	7407489	08/05/2008
United States	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	11/157758	06/21/2005	7402154	07/22/2008
United States	Use Of Digital Current Ramping To Reduce Audible Noise In Stepper Motors	09/454001	12/03/1999	6208107	03/27/2001
United States	Closed-Loop IV Fluid Flow Control	09/628846	07/31/2000	6685668	02/03/2004
United States	Closed-Loop IV Fluid Flow Control	10/727702	12/04/2003	6981960	01/03/2006
United States	Disposable Infusion Cassette With Low Air Bubble Retention And Improved Valves	09/842529	04/25/2001	6494694	12/17/2002

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United States	MicroNeedles For Minimally Invasive Drug Delivery	09/880377	06/13/2001	6767341	07/27/2004
United States	Fluid Flow Measurement Device	10/442575	05/21/2003	6813964	11/09/2004
United States	Fluid Flow Measurement Device	10/978866	10/29/2004	6964204	11/15/2005
United States	Fluid Delivery Device Identification And Loading System	10/667611	09/22/2003	7258534	08/21/2007
United States	Fluid Delivery Device Identification And Loading System	11/835798	08/08/2007	7766630	08/03/2010
United States	Fluid Delivery Device Identification And Loading System	12/635897	12/11/2009	8152486	04/10/2012
United States	Pump Tube Set Handling System	10/665776	09/19/2003	7160087	01/09/2007
Japan	Pump Tube Set Handling System	2011-001247	01/06/2011	5174195	01/11/2013
United States	Pump	29/190578	09/23/2003	D500326	12/28/2004
United States	Pump	29/201365	03/15/2004	D515205	02/14/2006
United States	Medical Device System	10/696830	10/30/2003	7896572	03/01/2011
Australia	Medical Device System	2004285557	10/29/2004	2004285557	02/10/2011
Australia	Medical Device System	2010238576	11/01/2010	2010238576	05/24/2012
Canada	Medical Device System	2543976	10/29/2004	2543976	03/26/2013
Canada	Medical Device System	2771870	10/29/2004	2771870	05/13/2014
European Patent Convention	Medical Device System	04817497.3	10/29/2004	1684829	05/21/2008
European Patent Convention	Medical Device System	06117796.0	10/29/2004	1745811	05/21/2008
France	Medical Device System	04817497.3	10/29/2004	1684829	05/21/2008
France	Medical Device System	06117796.0	10/29/2004	1745811	05/21/2008
Germany	Medical Device System	04817497.3	10/29/2004	602004014014.7	05/21/2008
Germany	Medical Device System	06117796.0	10/29/2004	602004014037.6	05/21/2008
Great Britain	Medical Device System	04817497.3	10/29/2004	1684829	05/21/2008
Italy	Medical Device System	502008901653272	10/29/2004	1745811	05/21/2008
Italy	Medical Device System	502008901653759	10/29/2004	1684829	05/21/2008
Japan	Medical Device System	2010-184669	08/20/2010	5189625	02/01/2013
Spain	Medical Device System	04817497.3	10/29/2004	1684829	05/21/2008
Spain	Medical Device System	06117796.0	10/29/2004	1745811	05/21/2008
United States	Medical Device System	10/823220	04/13/2004	7556616	07/07/2009

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United States	Medical Device System	12/903704	10/13/2010	8256984	09/04/2012
United States	User Interface Improvements for Medical Devices	11/103235	04/11/2005	7945452	05/17/2011
Australia	User Interface Improvements for Medical Devices	2006235527	04/01/2006	2006235527	01/12/2012
Australia	User Interface Improvements for Medical Devices	2011253917	12/08/2011	2011253917	08/21/2014
Canada	User Interface Improvements for Medical Devices	2603983	04/01/2006	2603983	10/15/2013
Japan	User Interface Improvements for Medical Devices	2008-506653	04/01/2006	5031728	07/06/2012
United States	User Interface Improvements for Medical Devices	11/959330	12/18/2007	7896842	03/01/2011
United States	User Interface Improvements for Medical Devices	13/107507	05/13/2011	8577692	11/05/2013
United States	System And Method For Improved Low Flow Medical Pump Delivery	10/810123	03/26/2004	8313308	11/20/2012
Canada	System And Method For Improved Low Flow Medical Pump Delivery	2561259	03/23/2005	2561259	10/08/2013
European Patent Convention	System And Method For Improved Low Flow Medical Pump Delivery	05729886.1	03/23/2005	1727575	05/22/2013
European Patent Convention	System And Method For Improved Low Flow Medical Pump Delivery	07814382.3	08/23/2007	2061970	01/17/2014
France	System And Method For Improved Low Flow Medical Pump Delivery	05729886.1	03/23/2005	1727575	05/22/2013
Germany	System And Method For Improved Low Flow Medical Pump Delivery	05729886.1	03/23/2005	602005039693.4	05/22/2013
Germany	System And Method For Improved Low Flow Medical Pump Delivery	07814382.3	08/23/2007	602007035149.9	01/17/2014
Great Britain	System And Method For Improved Low Flow Medical Pump Delivery	05729886.1	03/23/2005	1727575	05/22/2013
Great Britain	System And Method For Improved Low Flow Medical Pump Delivery	07814382.3	08/23/2007	2061970	01/17/2014
Japan	System And Method For Improved Low Flow Medical Pump Delivery	2009-525781	08/23/2007	5205645	03/01/2013
United States	System And Method For Improved Low Flow Medical Pump Delivery	11/510106	08/25/2006	7905710	03/11/2011
United States	Pump Cassette	29/199537	02/17/2004	D504507	04/26/2005
Canada	Medication Management System	2554903	10/07/2004	2554903	09/30/2014
United States	Medication Management System	10/783642	02/20/2004	7490021	02/10/2009
United States	Medication Management System	10/783640	02/20/2004	9123077	09/01/2015

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United States	Medication Management System	10/930358	08/31/2004	7895053	02/02/2011
United States	Medication Management System	11/591970	11/02/2006	7454314	11/18/2008
United States	Medication Management System	11/591965	11/02/2006	7398183	07/08/2008
United States	Medication Management System	14/841008	08/31/2015		
Australia	System for Maintaining Drug Information and Communicating with Medication Delivery Devices	2004292207	11/12/2004	2004292207	01/05/2012
Canada	System for Maintaining Drug Information and Communicating with Medication Delivery Devices	2545792	11/12/2004	2545792	01/07/2014
Japan	System for Maintaining Drug Information and Communicating with Medication Delivery Devices	2006-539924	11/12/2004	5069004	08/24/2012
Japan	System for Maintaining Drug Information and Communicating with Medication Delivery Devices	2012-107253	11/12/2004	5584726	07/25/2014
Japan	System for Maintaining Drug Information and Communicating with Medication Delivery Devices	2012-107254	05/09/2012	5647644	11/14/2014
United States	System for Maintaining Drug Information and Communicating with Medication Delivery Devices	10/783877	02/20/2004	8065161	11/22/2011
United States	System for Maintaining Drug Information and Communicating with Medication Delivery Devices	13/301493	11/21/2011	8380536	02/19/2013
United States	System for Maintaining Drug Information and Communicating with Medication Delivery Devices	13/301518	11/21/2011		
United States	Syringe Holding System	11/322675	12/30/2005	8926562	01/06/2015
Japan	Syringe Holding System	2008-548641	12/21/2006	4869354	11/25/2011
United States	Medication Administration And Management System And Method	11/692781	03/28/2007	8768719	07/01/2014
United States	Medication Administration And Management System And Method	11/692831	03/28/2007	8560345	10/15/2013
United States	Medication Administration And Management System And Method	11/692838	03/28/2007	8655676	02/18/2014
Canada	System And Method For Comparing And Utilizing Activity Information And Configuration Information From Multiple Medical Device Management Systems	2666509	10/16/2007		

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Canada	System And Method For Comparing And Utilizing Activity Information And Configuration Information From Multiple Medical Device Management Systems	2947792	11/08/2016		
United States	System And Method For Comparing And Utilizing Activity Information And Configuration Information From Multiple Medical Device Management Systems	12/882710	09/15/2010	8666769	03/04/2014
United States	System And Method For Comparing And Utilizing Activity Information And Configuration Information From Multiple Medical Device Management Systems	12/885986	09/20/2010	8731960	05/20/2014
United States	System And Method For Comparing And Utilizing Activity Information And Configuration Information From Multiple Medical Device Management Systems	12/886122	09/20/2010	8799012	08/05/2014
United States	System And Method For Comparing And Utilizing Activity Information And Configuration Information From Multiple Medical Device Management Systems	14/528907	10/30/2014		
United States	System And Method For Sequencing Channels In A Multi-Channel Infusion Pump	12/038507	02/27/2008	8231578	07/31/2012
United States	Radially Sealing Valve For An Infusion Set	12/194819	08/20/2008	8057437	11/15/2011
United States	System And Method For Reducing Air Bubbles In A Fluid Delivery Line	12/194685	08/20/2008	7981082	07/19/2011
United States	System And Method For Reducing Air Bubbles In A Fluid Delivery Line	13/154674	06/07/2011	8361021	01/29/2013
Australia	System And Method For Synchronizing Medication Configuration Information Among Systems Containing Medication Configuration Information	2008324002	11/06/2008	2008324002	08/29/2013
Canada	System And Method For Synchronizing Medication Configuration Information Among Systems Containing Medication Configuration Information	2705248	11/06/2008	2705248	02/10/2015

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European Patent Convention	System And Method For Synchronizing Medication Configuration Information Among Systems Containing Medication Configuration Information	08847611.4	11/06/2008		
Japan	System And Method For Synchronizing Medication Configuration Information Among Systems Containing Medication Configuration Information	2010-533229	11/06/2008	5357890	09/06/2013
United States	System And Method For Synchronizing Medication Configuration Information Among Systems Containing Medication Configuration Information	12/265470	11/05/2008	8660860	02/25/2014
United States	Differential Pressure Based Flow Sensor Assembly For Medication Delivery Monitoring And Method Of Using The Same	12/335128	12/15/2008	8403908	03/26/2013
United States	Differential Pressure Based Flow Sensor Assembly For Medication Delivery Monitoring And Method Of Using The Same	13/850126	03/26/2013	9272089	03/01/2016
Australia	Infusion Pump With Configurable Screen Settings	2008338367	12/18/2008	2008338367	05/09/2013
Canada	Infusion Pump With Configurable Screen Settings	2709184	12/18/2008	2709184	05/10/2016
European Patent Convention	Infusion Pump With Configurable Screen Settings	08862667.6	12/18/2008		
Japan	Infusion Pump With Configurable Screen Settings	2010-539790	12/18/2008	5670199	12/26/2014
United States	Infusion Pump With Configurable Screen Settings	12/336867	12/17/2008	9381296	07/05/2016
United States	Infusion Pump With Configurable Screen Settings	12/336981	12/17/2008	9393362	07/19/2016
United States	Infusion Pump With Configurable Screen Settings	12/337200	12/17/2008	8700421	04/15/2014
United States	Infusion Pump With Configurable Screen Settings	12/337316	12/17/2008	8543416	09/24/2013
Australia	User Interface Improvements For Medical Devices	2008338304	12/18/2008	2008338304	12/12/2013
Australia	User Interface Improvements For Medical Devices	2013260724	11/22/2013	2013260724	08/04/2016
Australia	User Interface Improvements For Medical Devices	2016204377	06/25/2016		
Canada	User Interface Improvements For Medical Devices	2709193	12/18/2008	2709193	01/03/2017
Canada	User Interface Improvements For Medical Devices	2944504	10/06/2016		
European Patent Convention	User Interface Improvements For Medical Devices	08862094.3	12/18/2008		
Japan	User Interface Improvements For Medical Devices	2010-539816	12/18/2008	5649452	11/21/2014

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United States	User Interface Improvements For Medical Devices	12/337569	12/17/2008	9026370	05/05/2015
United States	User Interface Improvements For Medical Devices	12/337588	12/17/2008	8517990	08/27/2013
United States	User Interface Improvements For Medical Devices	12/337669	12/18/2008		
United States	User Interface Improvements For Medical Devices	12/337745	12/18/2008	8078983	12/13/2011
United States	User Interface Improvements For Medical Devices	12/337803	12/18/2008		
United States	User Interface Improvements For Medical Devices	12/337888	12/18/2008	8494879	07/23/2013
United States	User Interface Improvements For Medical Devices	12/507926	07/23/2009	8185322	05/22/2012
Japan	Automated Point of Care Fluid Testing Device and Method of Using the Same	2011-508651	05/07/2009	5764056	06/19/2015
United States	Automated Point of Care Fluid Testing Device and Method of Using the Same	12/435074	05/04/2009	8523797	09/03/2013
United States	Automated Point of Care Fluid Testing Device and Method of Using the Same	12/862150	08/24/2010	8317698	11/27/2012
Australia	Cassette for Differential Pressure Based Flow Sensor & Method of Making Same	2009249016	05/21/2009	2009249016	10/30/2014
Canada	Cassette for Differential Pressure Based Flow Sensor & Method of Making Same	2725079	05/21/2009	2725079	10/27/2015
European Patent Convention	Cassette for Differential Pressure Based Flow Sensor & Method of Making Same	09751564.7	05/21/2009		
Japan	Cassette for Differential Pressure Based Flow Sensor & Method of Making Same	2011-510701	05/21/2009	5319761	07/19/2013
United States	Cassette For Differential Pressure Based Medication Delivery Flow Sensor Assembly For Medication Delivery Monitoring And Method Of Making The Same	12/468994	05/20/2009	8065924	11/29/2011
United States	System And Method For Authorized Medication Delivery	12/652140	01/05/2010	8777895	07/15/2014
Australia	Cassette For Use In A Medication Delivery Flow Sensor Assembly And Method Of Making The Same	2009288567	05/21/2009	2009288567	02/11/2016
Canada	Cassette For Use In A Medication Delivery Flow Sensor Assembly And Method Of Making The Same	2735703	05/21/2009	2735703	02/24/2015

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European Patent Convention	Cassette For Use In A Medication Delivery Flow Sensor Assembly And Method Of Making The Same	09811877.1	05/21/2009		
Japan	Cassette For Use In A Medication Delivery Flow Sensor Assembly And Method Of Making The Same	2011-525026	05/21/2009	5548198	05/23/2014
United States	Cassette For Use In A Medication Delivery Flow Sensor Assembly And Method Of Making The Same	12/469459	05/20/2009	7819838	10/26/2010
United States	Cassette For Use In A Medication Delivery Flow Sensor Assembly And Method Of Making The Same	12/842168	07/23/2010	8657778	02/25/2014
Australia	Cassette for Differential Pressure Based Medication Delivery Flow Sensor Assembly for Medication Delivery Monitoring and Method of Making the Same	2009338734	05/21/2009	2009338734	01/15/2015
Canada	Cassette for Differential Pressure Based Medication Delivery Flow Sensor Assembly for Medication Delivery Monitoring and Method of Making the Same	2750075	05/21/2009	2750075	06/30/2015
European Patent Convention	Cassette for Differential Pressure Based Medication Delivery Flow Sensor Assembly for Medication Delivery Monitoring and Method of Making the Same	09839438.0	05/21/2009		
United States	Cassette for Differential Pressure Based Medication Delivery Flow Sensor Assembly for Medication Delivery Monitoring and Method of Making the Same	12/469472	05/20/2009	8048022	11/01/2011
United States	Occlusion Detection System	12/707774	02/18/2010	8378837	02/19/2013
Australia	System and Method for Configuring a Rule Set for Medical Event Management and Responses	2010236315	04/16/2010	2010236315	08/01/2013
Australia	System and Method for Configuring a Rule Set for Medical Event Management and Responses	2013206325	06/14/2013	2013206325	05/21/2015
Canada	System and Method for Configuring a Rule Set for Medical Event Management and Responses	2758960	04/16/2010		

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European Patent Convention	System and Method for Configuring a Rule Set for Medical Event Management and Responses	10765238.0	04/16/2010		
Japan	System and Method for Configuring a Rule Set for Medical Event Management and Responses	2012-505951	04/16/2010	5631385	10/17/2014
United States	System and Method for Configuring a Rule Set for Medical Event Management and Responses	12/761107	04/15/2010	8271106	09/18/2012
United States	System and Method for Configuring a Rule Set for Medical Event Management and Responses	13/586615	08/15/2012		
United States	Improved Touch Screen System, Navigation and Programming Methods for Infusion Pump (SYMBIQ/SIMBA)	12/627715	11/30/2009	8317752	11/27/2012
Australia	Improved Touch Screen System, Navigation and Programming Methods for Infusion Pump (SYMBIQ/SIMBA)	2010324563	11/30/2010	2010324563	02/04/2016
Canada	Improved Touch Screen System, Navigation and Programming Methods for Infusion Pump (SYMBIQ/SIMBA)	2782376	11/30/2010	2782376	08/09/2016
European Patent Convention	Improved Touch Screen System, Navigation and Programming Methods for Infusion Pump (SYMBIQ/SIMBA)	10834042.3	11/30/2010		
Japan	Improved Touch Screen System, Navigation and Programming Methods for Infusion Pump (SYMBIQ/SIMBA)	2012-542131	11/30/2010	5893567	03/04/2016
Australia	Systems and Methods for Managing and Delivering Patient Therapy through Electronic Drug Delivery Systems	2010330746	12/17/2010	2010330746	06/09/2016
Canada	Systems and Methods for Managing and Delivering Patient Therapy through Electronic Drug Delivery Systems	2784143	12/17/2010	2784143	08/09/2016
European Patent Convention	Systems and Methods for Managing and Delivering Patient Therapy through Electronic Drug Delivery Systems	10838319.1	12/17/2010		

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Japan	Systems and Methods for Managing and Delivering Patient Therapy through Electronic Drug Delivery Systems	2012-544916	12/17/2010	5699161	02/20/2015
United States	Systems and Methods for Managing and Delivering Patient Therapy through Electronic Drug Delivery Systems	12/970777	12/16/2010	8771251	07/08/2014
Australia	Fluid Flow Rate Compensation System Using an Integrated Conductivity Sensor to Monitor Tubing Changes	2011270895	06/23/2011	2011270895	06/02/2016
Canada	Fluid Flow Rate Compensation System Using an Integrated Conductivity Sensor to Monitor Tubing Changes	2803881	06/23/2011		
European Patent Convention	Fluid Flow Rate Compensation System Using an Integrated Conductivity Sensor to Monitor Tubing Changes	11798896.4	06/23/2011		
United States	Fluid Flow Rate Compensation System Using an Integrated Conductivity Sensor to Monitor Tubing Changes	13/165490	06/21/2011	8858185	10/14/2014
Australia	Method of Varying the Flow Rate of Fluid from a Medical Pump and Hybrid Sensor System Performing the Same	2011285759	08/03/2011	2011285759	06/25/2015
Canada	Method of Varying the Flow Rate of Fluid from a Medical Pump and Hybrid Sensor System Performing the Same	2806586	08/03/2011		
European Patent Convention	Method of Varying the Flow Rate of Fluid from a Medical Pump and Hybrid Sensor System Performing the Same	11815245.3	08/03/2011	2601483	01/11/2017
France	Method of Varying the Flow Rate of Fluid from a Medical Pump and Hybrid Sensor System Performing the Same	11815245.3	08/03/2011	2601483	01/11/2017
Germany	Method of Varying the Flow Rate of Fluid from a Medical Pump and Hybrid Sensor System Performing the Same	11815245.3	08/03/2011	2601483	01/11/2017

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Great Britain	Method of Varying the Flow Rate of Fluid from a Medical Pump and Hybrid Sensor System Performing the Same	11815245.3	08/03/2011	2601483	01/11/2017
United States	Method of Varying the Flow Rate of Fluid from a Medical Pump and Hybrid Sensor System Performing the Same	13/196215	08/02/2011	8857269	10/14/2014
United States	Medical Identification System and Method of Identifying Individuals, Medical Items, and Associations Therebetween using Same	13/290254	11/07/2011	8662388	03/04/2014
Australia	Fluid Delivery Device Identification and Loading System	2011348133	12/22/2011	2011348133	02/04/2016
Canada	Fluid Delivery Device Identification and Loading System	2820969	12/22/2011		
European Patent Convention	Fluid Delivery Device Identification and Loading System	11851186.4	12/22/2011		
United States	Fluid Delivery Device Identification and Loading System	13/333228	12/21/2011	8777590	07/15/2014
United States	Ultrasonic Monitoring Device for Measuring Physiological Parameters of a Mammal	13/358609	01/26/2012	8864670	10/21/2014
Australia	Flow Stop Protective Means for a Fluid Delivery Device of a Medical Pump	2012275047	07/02/2012	2012275047	08/25/2016
United States	Flow Stop Protective Means for a Fluid Delivery Device of a Medical Pump	13/539606	07/02/2012	8591491	11/26/2013
Canada	Automated Blood Sampling System and Method	2842353	07/20/2012		
Australia	Systems and Methods for a Graphical Interface including a Graphical Representation of Medical Data	2012299169	08/17/2012		
Canada	Systems and Methods for a Graphical Interface including a Graphical Representation of Medical Data	2844807	08/17/2012		
European Patent Convention	Systems and Methods for a Graphical Interface including a Graphical Representation of Medical Data	12825179.0	08/17/2012		

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United States	Systems and Methods for a Graphical Interface including a Graphical Representation of Medical Data	13/588026	08/17/2012	9240002	01/19/2016
United States	Systems and Methods for a Graphical Interface including a Graphical Representation of Medical Data	14/973236	12/17/2015		
Australia	Pattern Recognition System and Method for the Detection of Stuck Fluid Droplets in a Fluid Delivery Line of an Infusion System	2012299103	08/17/2012		
Canada	Pattern Recognition System and Method for the Detection of Stuck Fluid Droplets in a Fluid Delivery Line of an Infusion System	2845278	08/17/2012		
European Patent Convention	Pattern Recognition System and Method for the Detection of Stuck Fluid Droplets in a Fluid Delivery Line of an Infusion System	12825020.6	08/17/2012		
United States	Pattern Recognition System and Method for the Detection of Stuck Fluid Droplets in a Fluid Delivery Line of an Infusion System	13/588049	08/17/2012	9114217	08/25/2015
Australia	Froth Detection System and Method	2012315820	09/28/2012	2012315820	01/12/2017
Canada	Froth Detection System and Method	2849986	09/28/2012		
European Patent Convention	Froth Detection System and Method	12834982.6	09/28/2012		
Japan	Froth Detection System and Method	2014-533384	09/28/2012		
United States	Froth Detection System and Method	13/630031	09/28/2012	9498583	11/22/2016
Brazil	Intravenous Flow Rate Controller	BR1120140071454	09/28/2012		
Brazil	Intravenous Flow Rate Controller	BR1120140076588	09/28/2012		
China P.R.	Intravenous Flow Rate Controller	201280048122.7	09/28/2012	ZL201280048122.7	09/14/2016
China P.R.	Intravenous Flow Rate Controller	201280048123.1	09/28/2012	ZL201280048123.1	05/25/2016
Mexico	Intravenous Flow Rate Controller	MX/a/2014/003851	09/28/2012		
Mexico	Intravenous Flow Rate Controller	MX/a/2014/003855	09/28/2012		
United States	Intravenous Flow Rate Controller	13/631339	09/28/2012	9134735	09/15/2015
United States	Intravenous Flow Rate Controller	13/631422	09/28/2012	9134736	09/15/2015
Australia	Medical Device Update System	2012325937	10/19/2012		
Canada	Medical Device Update System	2852271	10/19/2012		

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European Patent Convention	Medical Device Update System	12840952.1	10/19/2012		
Japan	Medical Device Update System	2014-537294	10/19/2012	6033874	11/04/2016
United States	Medical Device Update System	13/655690	10/19/2012		
Japan	Medical Device Update System	2016-208635	10/25/2016		
United States	Medical Device Update System	15/289483	10/10/2016		
United States	System for Monitoring and Delivering Medication to a Patient and Method of Using the Same to Minimize the Risks Associated with Automated Therapy	13/714545	12/14/2012		
Australia	Air Detection System and Method for Detecting Air in a Pump of an Infusion System	2013239778	03/27/2013		
Canada	Air Detection System and Method for Detecting Air in a Pump of an Infusion System	2868801	03/27/2013		
European Patent Convention	Air Detection System and Method for Detecting Air in a Pump of an Infusion System	13768125.0	03/27/2013		
Japan	Air Detection System and Method for Detecting Air in a Pump of an Infusion System	2015-503508	03/27/2013		
United States	Air Detection System and Method for Detecting Air in a Pump of an Infusion System	13/851207	03/27/2013		
Australia	Patient Care System for Critical Medications	2013296555	07/31/2013		
Canada	Patient Care System for Critical Medications	2880156	07/31/2013		
European Patent Convention	Patient Care System for Critical Medications	13825429.7	07/31/2013		
United States	Patient Care System for Critical Medications	13/955121	07/31/2013		
United States	Means and Method for Detecting Free Flow in an Infusion Line	14/019745	09/06/2013	9468718	10/18/2016
United States	Apparatus and Method of Mitigating Free Flow in a Fluid Administration Set	14/067083	10/30/2013	9468713	10/18/2016
United States	Fluid Flow Passage to Improve Air-in-Line Detection	14/065938	10/29/2013	8801656	08/12/2014
Australia	Medical Device Communication Method	2014225658	03/06/2014		
Canada	Medical Device Communication Method	2904053	03/06/2014		
European Patent Convention	Medical Device Communication Method	14760652.9	03/06/2014		

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
United States	Medical Device Communication Method	14/198807	03/06/2014		
Australia	Infusion System and Method of Use which Prevents Over-Saturation of an Analog-to-Digital Converter	2014274122	05/29/2014		
Canada	Infusion System and Method of Use which Prevents Over-Saturation of an Analog-to-Digital Converter	2913918	05/29/2014		
European Patent Convention	Infusion System and Method of Use which Prevents Over-Saturation of an Analog-to-Digital Converter	14805039.6	05/29/2014		
United States	Infusion System and Method of Use which Prevents Over-Saturation of an Analog-to-Digital Converter	14/289796	05/29/2014		
Australia	Multi-Sensor Infusion System for Detecting Air or an Occlusion in the Infusion System	2014268355	05/23/2014		
Canada	Multi-Sensor Infusion System for Detecting Air or an Occlusion in the Infusion System	2913421	05/23/2014		
European Patent Convention	Multi-Sensor Infusion System for Detecting Air or an Occlusion in the Infusion System	14801282.6	05/23/2014		
United States	Multi-Sensor Infusion System for Detecting Air or an Occlusion in the Infusion System	14/285797	05/23/2014		
Australia	Infusion System which Utilizes One or More Sensors and Additional Information to Make an Air Determination Regarding the Infusion System	2014274146	05/29/2014		
Canada	Infusion System which Utilizes One or More Sensors and Additional Information to Make an Air Determination Regarding the Infusion System	2913915	05/29/2014		
European Patent Convention	Infusion System which Utilizes One or More Sensors and Additional Information to Make an Air Determination Regarding the Infusion System	14803793.0	05/29/2014		
United States	Infusion System which Utilizes One or More Sensors and Additional Information to Make an Air Determination Regarding the Infusion System	14/289848	05/29/2014		

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
Australia	System and Method of Monitoring and Managing a Remote Infusion Regimen	2014312122	08/29/2014		
Canada	System and Method of Monitoring and Managing a Remote Infusion Regimen	2922425	08/29/2014		
European Patent Convention	System and Method of Monitoring and Managing a Remote Infusion Regimen	14841003.8	08/29/2014		
Japan	System and Method of Monitoring and Managing a Remote Infusion Regimen	2016-537899	08/29/2014		
United States	System and Method of Monitoring and Managing a Remote Infusion Regimen	14/472549	08/29/2014		
Australia	Fail-Safe Drug Infusion Therapy System	2014321381	09/19/2014		
Canada	Fail-Safe Drug Infusion Therapy System	2925558	09/19/2014		
European Patent Convention	Fail-Safe Drug Infusion Therapy System	14845691.6	09/19/2014		
Japan	Fail-Safe Drug Infusion Therapy System	2016-544015	09/19/2014		
United States	Fail-Safe Drug Infusion Therapy System	14/490450	09/18/2014		
United States	Thermal Management System and Method for Medical Devices	14/538339	11/11/2014		
United States	Medical Device System for Performance Index	14/538545	11/11/2014		
Australia	Infusion Pump Automation System and Method	2014353130	11/19/2014		
Canada	Infusion Pump Automation System and Method	2930830	11/19/2014		
European Patent Convention	Infusion Pump Automation System and Method	14863637.6	11/19/2014		
Japan	Infusion Pump Automation System and Method	2016-554554	11/19/2014		
United States	Infusion Pump Automation System and Method	14/547376	11/19/2014		
Australia	Door Mount Stabilization System for an Infusion Pump	2014364913	12/16/2014		
Canada	Door Mount Stabilization System for an Infusion Pump	2931802	12/16/2014		
European Patent Convention	Door Mount Stabilization System for an Infusion Pump	14872457.8	12/16/2014		
Japan	Door Mount Stabilization System for an Infusion Pump	2016-558548	12/16/2014		
United States	Door Mount Stabilization System for an Infusion Pump	14/571559	12/16/2014		

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Australia	Infusion Pump Battery Capacity Management and Battery Charge Alert System and Method	2015206259	01/16/2015		
Canada	Infusion Pump Battery Capacity Management and Battery Charge Alert System and Method	2934719	01/16/2015		
European Patent Convention	Infusion Pump Battery Capacity Management and Battery Charge Alert System and Method	15737750.8	01/16/2015		
Japan	Infusion Pump Battery Capacity Management and Battery Charge Alert System and Method	2016-546783	01/16/2015		
United States	Infusion Pump Battery Capacity Management and Battery Charge Alert System and Method	14/598846	01/16/2015	9333291	05/10/2016
Australia	Infusion System and Method which Utilizes Dual Wavelength Optical Air-in-Line Detection	2015222800	02/27/2015		
Canada	Infusion System and Method which Utilizes Dual Wavelength Optical Air-in-Line Detection	2939302	02/27/2015		
European Patent Convention	Infusion System and Method which Utilizes Dual Wavelength Optical Air-in-Line Detection	15755292.8	02/27/2015		
Japan	Infusion System and Method which Utilizes Dual Wavelength Optical Air-in-Line Detection	2016-554252	02/27/2015		
United States	Infusion System and Method which Utilizes Dual Wavelength Optical Air-in-Line Detection	14/633614	02/27/2015		
Australia	Patient Care System with Conditional Alarm Forwarding	2015253001	04/30/2015		
Canada	Patient Care System with Conditional Alarm Forwarding	2945647	04/30/2015		
European Patent Convention	Patient Care System with Conditional Alarm Forwarding	15785300.3	04/30/2015		
Japan	Patient Care System with Conditional Alarm Forwarding	2016-564957	04/30/2015		
United States	Patient Care System with Conditional Alarm Forwarding	14/700357	04/30/2015		
Australia	Infusion System And Pump With Configurable Closed Loop Delivery Rate Catch-Up	2015266706	05/29/2015		
Canada	Infusion System And Pump With Configurable Closed Loop Delivery Rate Catch-Up	2947045	05/29/2015		

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
Colombia	Infusion System And Pump With Configurable Closed Loop Delivery Rate Catch-Up	NC2016/0006138	05/29/2015		
European Patent Convention	Infusion System And Pump With Configurable Closed Loop Delivery Rate Catch-Up	15799090.4	05/29/2015		
Japan	Infusion System And Pump With Configurable Closed Loop Delivery Rate Catch-Up	2016-564956	05/29/2015		
United States	Infusion System And Pump With Configurable Closed Loop Delivery Rate Catch-Up	14/725077	05/29/2015		
Australia	Intravenous Pole Integrated Power, Control, and Communication System and Method for an Infusion Pump	2015305673	08/18/2015		
Canada	Intravenous Pole Integrated Power, Control, and Communication System and Method for an Infusion Pump	PCT/US2015/045663	08/18/2015		
European Patent Convention	Intravenous Pole Integrated Power, Control, and Communication System and Method for an Infusion Pump	PCT/US2015/045663	08/18/2015		
Japan	Intravenous Pole Integrated Power, Control, and Communication System and Method for an Infusion Pump	PCT/US2015/045663	08/18/2015		
Patent Cooperation Treaty	Intravenous Pole Integrated Power, Control, and Communication System and Method for an Infusion Pump	PCT/US2015/045663	08/18/2015		
United States	Intravenous Pole Integrated Power, Control, and Communication System and Method for an Infusion Pump	14/828008	08/17/2015		
Australia	System for Monitoring and Delivering Medication to a Patient and Method of Using the Same to Minimize the Risks Associated with Automated Therapy	2015277339	06/16/2015		
Canada	System for Monitoring and Delivering Medication to a Patient and Method of Using the Same to Minimize the Risks Associated with Automated Therapy	2948012	06/16/2015		

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
Colombia	System for Monitoring and Delivering Medication to a Patient and Method of Using the Same to Minimize the Risks Associated with Automated Therapy	NC2017/0000361	06/16/2015		
European Patent Convention	System for Monitoring and Delivering Medication to a Patient and Method of Using the Same to Minimize the Risks Associated with Automated Therapy	15809382.3	06/16/2015		
Japan	System for Monitoring and Delivering Medication to a Patient and Method of Using the Same to Minimize the Risks Associated with Automated Therapy	PCT/US2015/036058	06/16/2015		
United States	System for Monitoring and Delivering Medication to a Patient and Method of Using the Same to Minimize the Risks Associated with Automated Therapy	14/739840	06/15/2015		
Australia	Infusion Pump Error Display	2015284181	06/30/2015		
Canada	Infusion Pump Error Display	2950942	06/30/2015		
Colombia	Infusion Pump Error Display	PCT/US2015/038633	06/30/2015		
European Patent Convention	Infusion Pump Error Display	15814101.0	06/30/2015		
Japan	Infusion Pump Error Display	PCT/US2015/038633	06/30/2015		
Patent Cooperation Treaty	Infusion Pump Error Display	PCT/US2015/038633	06/30/2015		
United States	Infusion Pump Error Display	14/755021	06/30/2015		
Patent Cooperation Treaty	Matching Delayed Infusion Auto-Programs with Manually Entered Infusion Programs	PCT/US2015/050128	09/15/2015		
United States	Matching Delayed Infusion Auto-Programs with Manually Entered Infusion Programs	14/853198	09/14/2015	9539383	01/10/2017
Patent Cooperation Treaty	Infusion System with Concurrent TPN/Insulin Infusion	PCT/US2015/066595	12/18/2015		

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
United States	Infusion System with Concurrent TPN/Insulin Infusion	14/972585	12/17/2015		
Patent Cooperation Treaty	Infusion System, Device, and Method Having Advanced Infusion Features	PCT/US2016/020355	03/02/2016		
United States	Infusion System, Device, and Method Having Advanced Infusion Features	15/057250	03/01/2016		
Patent Cooperation Treaty	Infusion Pump System And Method With Multiple Drug Library Editor Source Capability	PCT/IB2016/052822	05/16/2016		
United States	Infusion Pump System And Method With Multiple Drug Library Editor Source Capability	15/164251	05/25/2016		
Patent Cooperation Treaty	Disposable Infusion Fluid Delivery Device For Programmable Large Volume Drug Delivery	PCT/IB2016/052830	05/16/2016		
United States	Disposable Infusion Fluid Delivery Device For Programmable Large Volume Drug Delivery	15/164277	05/25/2016		
United States	Control Of A Drug Infusion Device	62/319849	04/08/2016		
United States	Control Of A Drug Infusion Device				
United States	Infusion Pump System and Method With Common Line Auto Flush	62/336191	05/13/2016		
United States	Acoustic Flow Sensor For Continuous Medication Flow Measurements And Feedback Control Of Infusion	62/348301	06/10/2016		
United States	Multi-Communication Path Selection And Security System For A Medical Device	62/362299	07/14/2016		
Australia	Pump With Anti-Free Flow Feature	1998080631	06/10/1998	737662	12/13/2001
Canada	Pump With Anti-Free Flow Feature	2292602	06/10/1998	2292602	01/13/2009
European Patent Convention	Pump With Anti-Free Flow Feature	98928948.3	06/10/1998	0984814	11/10/2004
France	Pump With Anti-Free Flow Feature	98928948.3	06/10/1998	0984814	11/10/2004

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
Germany	Pump With Anti-Free Flow Feature	98928948.3	06/10/1998	69827491.1	11/10/2004
Great Britain	Pump With Anti-Free Flow Feature	98928948.3	06/10/1998	0984814	11/10/2004
Ireland	Pump With Anti-Free Flow Feature	98928948.3	06/10/1998	0984814	11/10/2004
Italy	Pump With Anti-Free Flow Feature	98928948.3	06/10/1998	0984814	11/10/2004
Japan	Pump With Anti-Free Flow Feature	50-308999	06/10/1998	4003818	08/31/2007
Patent Cooperation Treaty	Pump With Anti-Free Flow Feature	PCT/US98/11915	06/10/1998		
Spain	Pump With Anti-Free Flow Feature	98928948.3	06/10/1998	0984814	11/10/2004
Australia	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	1998078300	06/10/1998	735958	11/01/2001
Austria	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	0983102	05/02/2002
Belgium	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	0983102	05/02/2002
Canada	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	2290422	06/10/1998	2290422	05/22/2007
Cyprus	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	0983102	05/02/2002
Denmark	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	0983102	05/02/2002
European Patent Convention	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	0983102	05/02/2002
Finland	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	0983102	05/02/2002
France	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	0983102	05/02/2002
Germany	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	69805174.2	05/02/2002

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
Great Britain	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	0983102	05/02/2002
Greece	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	0983102	05/02/2002
Ireland	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	0983102	05/02/2002
Italy	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	0983102	05/02/2002
Japan	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	50309299	06/10/1998	3976154	06/29/2007
Luxembourg	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	0983102	05/02/2002
Netherlands	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	0983102	05/02/2002
Patent Cooperation Treaty	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	PCT/US98/11919	06/10/1998		
Portugal	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	0983102	05/02/2002
Spain	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	0983102	05/02/2002
Sweden	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	0983102	05/02/2002
Switzerland	Pump With Door-Mounted Mechanism For Positioning Tubing In The Pump Housing	98926467.6	06/10/1998	0983102	05/02/2002
Australia	Temperature Compensation System For Regulating Flow Through Tubing In A Pump	1998079568	06/10/1998	736882	11/15/2001
Canada	Temperature Compensation System For Regulating Flow Through Tubing In A Pump	2292660	06/10/1998	2292660	11/06/2007
European Patent Convention	Temperature Compensation System For Regulating Flow Through Tubing In A Pump	98930098.3	06/10/1998	0988451	01/19/2005
France	Temperature Compensation System For Regulating Flow Through Tubing In A Pump	98930098.3	06/10/1998	0988451	01/19/2005
Germany	Temperature Compensation System For Regulating Flow Through Tubing In A Pump	98930098.3	06/10/1998	69828689.8	01/19/2005

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
Great Britain	Temperature Compensation System For Regulating Flow Through Tubing In A Pump	98930098.3	06/10/1998	0988451	01/19/2005
Ireland	Temperature Compensation System For Regulating Flow Through Tubing In A Pump	98930098.3	06/10/1998	0988451	01/19/2005
Italy	Temperature Compensation System For Regulating Flow Through Tubing In A Pump	98930098.3	06/10/1998	0988451	01/19/2005
Japan	Temperature Compensation System For Regulating Flow Through Tubing In A Pump	50309099	06/10/1998	4270474	03/06/2009
Netherlands	Temperature Compensation System For Regulating Flow Through Tubing In A Pump	98930098.3	06/10/1998	0988451	01/19/2005
Patent Cooperation Treaty	Temperature Compensation System For Regulating Flow Through Tubing In A Pump	PCT/US98/11916	06/10/1998		
Spain	Temperature Compensation System For Regulating Flow Through Tubing In A Pump	98930098.3	06/10/1998	0988451	01/19/2005
Australia	Battery Capacity Measurement Circuit	9513398	09/30/1998	755727	04/17/2003
Canada	Battery Capacity Measurement Circuit	2305402	09/30/1998	2305402	01/29/2008
European Patent Convention	Battery Capacity Measurement Circuit	08154156.7	09/30/1998		
European Patent Convention	Battery Capacity Measurement Circuit	98948594.1	09/30/1998	1019743	05/21/2008
France	Battery Capacity Measurement Circuit	98948594.1	09/30/1998	1019743	05/21/2008
Germany	Battery Capacity Measurement Circuit	98948594.1	09/30/1998	69839522.0	05/21/2008
Great Britain	Battery Capacity Measurement Circuit	98948594.1	09/30/1998	1019743	05/21/2008
Italy	Battery Capacity Measurement Circuit	98948594.1	09/30/1998	1019743	05/21/2008
Japan	Battery Capacity Measurement Circuit	2000516236T	09/30/1998		
Patent Cooperation	Battery Capacity Measurement Circuit	PCT/US98/20492	09/30/1998		

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
Treaty					
Spain	Battery Capacity Measurement Circuit	98948594.1	09/30/1998	1019743	05/21/2008
Australia	Pressure (Occlusion) Sensor	1999048212	06/11/1999	765163	01/15/2004
Canada	Pressure (Occlusion) Sensor	2334477	06/11/1999	2334477	01/08/2008
European Patent Convention	Pressure (Occlusion) Sensor	99931780.3	06/11/1999	1083950	10/19/2005
France	Pressure (Occlusion) Sensor	99931780.3	06/11/1999	1083950	10/19/2005
Germany	Pressure (Occlusion) Sensor	99931780.3	06/11/1999	69927811.2	10/19/2005
Great Britain	Pressure (Occlusion) Sensor	99931780.3	06/11/1999	1083950	10/19/2005
Ireland	Pressure (Occlusion) Sensor	99931780.3	06/11/1999	1083950	10/19/2005
Italy	Pressure (Occlusion) Sensor	99931780.3	06/11/1999	1083950	10/19/2005
Japan	Pressure (Occlusion) Sensor	2000553158	06/11/1999	4141639	06/20/2008
Patent Cooperation Treaty	Pressure (Occlusion) Sensor	PCT/US99/13016	06/11/1999		
Spain	Pressure (Occlusion) Sensor	99931780.3	06/11/1999	1083950	10/19/2005
Australia	Air Bubble Sensor	1999044224	06/04/1999	759455	08/14/2003
Canada	Air Bubble Sensor	2334295	06/04/1999	2334295	12/09/2008
European Patent Convention	Air Bubble Sensor	00923155.6	04/06/2000		
European Patent Convention	Air Bubble Sensor	99927282.6	06/04/1999	1085922	09/14/2005

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
France	Air Bubble Sensor	99927282.6	06/04/1999	1085922	09/14/2005
Germany	Air Bubble Sensor	99927282.6	06/04/1999	69927263.7	09/14/2005
Great Britain	Air Bubble Sensor	99927282.6	06/04/1999	1085922	09/14/2005
Ireland	Air Bubble Sensor	99927282.6	06/04/1999	1085922	09/14/2005
Italy	Air Bubble Sensor	99927282.6	06/04/1999	1085922	09/14/2005
Japan	Air Bubble Sensor	JP2000553160T	06/04/1999		
Patent Cooperation Treaty	Air Bubble Sensor	PCT/US00/09245	04/06/2000		
Patent Cooperation Treaty	Air Bubble Sensor	PCT/US99/12642	06/04/1999		
Spain	Air Bubble Sensor	99927282.6	06/04/1999	1085922	09/14/2005
Australia	Watertight Battery Compartment Cover With Latch Actuated O-Ring Seal	1999045478	06/04/1999	744138	05/30/2002
Canada	Watertight Battery Compartment Cover With Latch Actuated O-Ring Seal	2335238	06/04/1999	2335238	03/25/2008
European Patent Convention	Watertight Battery Compartment Cover With Latch Actuated O-Ring Seal	99928403.7	06/04/1999	1090432	07/12/2006
France	Watertight Battery Compartment Cover With Latch Actuated O-Ring Seal	99928403.7	06/04/1999	1090432	07/12/2006
Germany	Watertight Battery Compartment Cover With Latch Actuated O-Ring Seal	99928403.7	06/04/1999	69932335.5	07/12/2006
Great Britain	Watertight Battery Compartment Cover With Latch Actuated O-Ring Seal	99928403.7	06/04/1999	1090432	07/12/2006
Italy	Watertight Battery Compartment Cover With Latch Actuated O-Ring Seal	99928403.7	06/04/1999	1090432	07/12/2006

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Japan	Watertight Battery Compartment Cover With Latch Actuated O-Ring Seal	200055308	06/04/1999		
Patent Cooperation Treaty	Watertight Battery Compartment Cover With Latch Actuated O-Ring Seal	PCT/US99/12586	06/04/1999		
Spain	Watertight Battery Compartment Cover With Latch Actuated O-Ring Seal	99928403.7	06/04/1999	1090432	07/12/2006
Australia	Pseudo Half-Step Motor Drive Method And Apparatus	1205301	10/13/2000	767403	02/26/2004
Canada	Pseudo Half-Step Motor Drive Method And Apparatus	2387158	10/13/2000	2387158	02/15/2011
European Patent Convention	Pseudo Half-Step Motor Drive Method And Apparatus	00973553.1	10/13/2000		
Japan	Pseudo Half-Step Motor Drive Method And Apparatus	JP20010535294T	10/13/2000	4786099	07/22/2011
Patent Cooperation Treaty	Pseudo Half-Step Motor Drive Method And Apparatus	PCT/US00/28503	10/13/2000		
Canada	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	2393337	12/15/2000	2393337	03/24/2009
France	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	00984470.5	12/15/2000	1237595	11/09/2005
Germany	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	00984470.5	12/15/2000	60023937.3	11/09/2005
Great Britain	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	00984470.5	12/15/2000	1237595	11/09/2005
Italy	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	00984470.5	12/15/2000	1237595	11/09/2005
Japan	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	JP20010544933T	12/15/2000	4673535	01/28/2011
Patent Cooperation Treaty	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	PCT/US00/34207	12/15/2000		
Spain	Method For Compensating For Pressure Differences Across Valves In Cassette Type IV Pump	00984470.5	12/15/2000	1237595	11/09/2005

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Australia	Use Of Digital Current Ramping To Reduce Audible Noise In Stepper Motors	2054901	12/01/2000	772288	08/12/2004
Canada	Use Of Digital Current Ramping To Reduce Audible Noise In Stepper Motors	2392082	12/01/2000	2392082	06/26/2012
European Patent Convention	Use Of Digital Current Ramping To Reduce Audible Noise In Stepper Motors	00983839.2	12/01/2000		
Japan	Use Of Digital Current Ramping To Reduce Audible Noise In Stepper Motors	2001542452	12/01/2000	4719394	04/08/2011
Patent Cooperation Treaty	Use Of Digital Current Ramping To Reduce Audible Noise In Stepper Motors	PCT/US00/32650	12/01/2000		
Australia	Closed-Loop IV Fluid Flow Control	2001279072	07/27/2001	2001279072	05/19/2006
Canada	Closed-Loop IV Fluid Flow Control	2410777	07/27/2001	2410777	05/19/2009
European Patent Convention	Closed-Loop IV Fluid Flow Control	01957314.6	07/27/2001	1305067	06/01/2005
France	Closed-Loop IV Fluid Flow Control	01957314.6	07/27/2001	1305067	06/01/2005
Germany	Closed-Loop IV Fluid Flow Control	01957314.6	07/27/2001	60111234.2	06/01/2005
Great Britain	Closed-Loop IV Fluid Flow Control	01957314.6	07/27/2001	1305067	06/01/2005
Ireland	Closed-Loop IV Fluid Flow Control	01957314.6	07/27/2001	1305067	06/01/2005
Italy	Closed-Loop IV Fluid Flow Control	01957314.6	07/27/2001	1305067	06/01/2005
Japan	Closed-Loop IV Fluid Flow Control	JP20020515346T	07/27/2001		
Netherlands	Closed-Loop IV Fluid Flow Control	01957314.6	07/27/2001	1305067	06/01/2005
Patent Cooperation Treaty	Closed-Loop IV Fluid Flow Control	PCT/US01/23782	07/27/2001		

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
Spain	Closed-Loop IV Fluid Flow Control	01957314.6	07/27/2001	1305067	06/01/2005
Australia	Disposable Infusion Cassette With Low Air Bubble Retention And Improved Valves	2002248586	03/11/2002	2002248586	05/19/2006
Canada	Disposable Infusion Cassette With Low Air Bubble Retention And Improved Valves	2445585	03/11/2002	2445585	01/19/2010
Canada	Disposable Infusion Cassette With Low Air Bubble Retention And Improved Valves	2683199	03/11/2002	2683199	12/18/2012
Canada	Disposable Infusion Cassette With Low Air Bubble Retention And Improved Valves	2683201	03/11/2002	2683201	05/22/2012
Canada	Disposable Infusion Cassette With Low Air Bubble Retention And Improved Valves	2683203	03/11/2002		
European Patent Convention	Disposable Infusion Cassette With Low Air Bubble Retention And Improved Valves	02717598.3	03/11/2002	1383558	07/08/2009
France	Disposable Infusion Cassette With Low Air Bubble Retention And Improved Valves	02717598.3	03/11/2002	1383558	07/08/2009
Germany	Disposable Infusion Cassette With Low Air Bubble Retention And Improved Valves	02717598.3	03/11/2002	60232869	07/08/2009
Great Britain	Disposable Infusion Cassette With Low Air Bubble Retention And Improved Valves	02717598.3	03/11/2002	1383558	07/08/2009
Italy	Disposable Infusion Cassette With Low Air Bubble Retention And Improved Valves	02717598.3	03/11/2002	1383558	07/08/2009
Japan	Disposable Infusion Cassette With Low Air Bubble Retention And Improved Valves	2002585005	03/11/2002	4212899	11/07/2008
Patent Cooperation Treaty	Disposable Infusion Cassette With Low Air Bubble Retention And Improved Valves	PCT/US02/07253	03/11/2002		
Spain	Disposable Infusion Cassette With Low Air Bubble Retention And Improved Valves	02717598.3	03/11/2002	1383558	07/08/2009
Canada	MicroNeedles For Minimally Invasive Drug Delivery	2450367	05/22/2002	2450367	12/15/2009
European Patent Convention	MicroNeedles For Minimally Invasive Drug Delivery	02739360.2	05/22/2002	1418977	01/10/2007
European Patent Convention	MicroNeedles For Minimally Invasive Drug Delivery	06111487.2	05/22/2002	1695734	06/04/2008

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
France	MicroNeedles For Minimally Invasive Drug Delivery	02739360.2	05/22/2002	1418977	01/10/2007
France	MicroNeedles For Minimally Invasive Drug Delivery	061111487.2	05/22/2002	1695734	06/04/2008
Germany	MicroNeedles For Minimally Invasive Drug Delivery	02739360.2	05/22/2002	60217510.0	01/10/2007
Germany	MicroNeedles For Minimally Invasive Drug Delivery	061111487.2	05/22/2002	60227014.6	06/04/2008
Great Britain	MicroNeedles For Minimally Invasive Drug Delivery	02739360.2	05/22/2002	1418977	01/10/2007
Great Britain	MicroNeedles For Minimally Invasive Drug Delivery	061111487.2	05/22/2002	1695734	06/04/2008
Ireland	MicroNeedles For Minimally Invasive Drug Delivery	02739360.2	05/22/2002	1418977	01/10/2007
Italy	MicroNeedles For Minimally Invasive Drug Delivery	02739360.2	05/22/2002	1418977	01/10/2007
Italy	MicroNeedles For Minimally Invasive Drug Delivery	061111487.2	05/22/2002	1695734	06/04/2008
Japan	MicroNeedles For Minimally Invasive Drug Delivery	2003503290	05/22/2002	4286131	04/03/2009
Patent Cooperation Treaty	MicroNeedles For Minimally Invasive Drug Delivery	PCT/US02/16323	05/22/2002		
Spain	MicroNeedles For Minimally Invasive Drug Delivery	02739360.2	05/22/2002	1418977	01/10/2007
Spain	MicroNeedles For Minimally Invasive Drug Delivery	061111487.2	05/22/2002	1695734	06/04/2008
United States	MicroNeedles For Minimally Invasive Drug Delivery	10/767485	01/29/2004	6980855	12/27/2005
Australia	Fluid Flow Measurement Device	2004320405	05/24/2004	2004320405	12/23/2010
Canada	Fluid Flow Measurement Device	2567610	05/24/2004		
European Patent Convention	Fluid Flow Measurement Device	04753159.5	05/24/2004		

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
Japan	Fluid Flow Measurement Device	2007515005	05/24/2004	4617356	10/01/2010
Patent Cooperation Treaty	Fluid Flow Measurement Device	PCT/US2004/16283	05/24/2004		
United States	Fluid Flow Measurement Device	11/205929	08/17/2005	7082843	08/01/2006
Australia	Fluid Delivery Device Identification And Loading System	2004275727	09/16/2004	2004275727	05/27/2010
Australia	Fluid Delivery Device Identification And Loading System	2010200090	01/08/2010	2010200090	03/08/2012
Canada	Fluid Delivery Device Identification And Loading System	2539242	09/16/2004	2539242	02/12/2013
European Patent Convention	Fluid Delivery Device Identification And Loading System	04784446.9	09/16/2004		
Japan	Fluid Delivery Device Identification And Loading System	20060527079	09/16/2004	4675899	02/04/2011
Patent Cooperation Treaty	Fluid Delivery Device Identification And Loading System	PCT/US2004/30586	09/16/2004		
United States	Fluid Delivery Device Identification And Loading System	11/835894	08/08/2007		
Australia	Pump Tube Set Handling System	2004273882	09/16/2004	2004273882	01/20/2011
Canada	Pump Tube Set Handling System	2539267	09/16/2004	2539267	11/22/2011
European Patent Convention	Pump Tube Set Handling System	04788768.2	09/16/2004		
Japan	Pump Tube Set Handling System	JP20060527005T	09/16/2004		
Patent Cooperation Treaty	Pump Tube Set Handling System	PCT/US2004/30231	09/16/2004		
United States	Pump	29/190384	09/19/2003		

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Austria	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Benelux	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Canada	Pump	106277	03/18/2004	106277	10/20/2005
Denmark	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
European Community Design	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Finland	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
France	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Germany	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Great Britain	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Greece	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Ireland	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Italy	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Portugal	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Spain	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Sweden	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
United States	Pump	29/190577	09/23/2003		
United States	Pump	29/198363	01/28/2004		

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United States	Pump	29/199636	02/18/2004		
United States	Pump	29/190382	09/19/2003		
Austria	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Benelux	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Canada	Pump	106278	03/18/2004	106278	10/20/2005
Denmark	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
European Community Design	Pump	000156625	03/17/2004	0001566250001	03/17/2004
Finland	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
France	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Germany	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Great Britain	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Greece	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Ireland	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Italy	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Portugal	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Spain	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004
Sweden	Pump	0001566250001	03/17/2004	0001566250001	03/17/2004

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United States	Pump	29/190630	09/24/2003		
United States	Pump	29/190631	09/24/2003		
European Patent Convention	Medical Device System	08156430.4	10/29/2004		
Great Britain	Medical Device System	06117796.0	10/29/2004	1745811	05/21/2008
Japan	Medical Device System	2006-538380	10/29/2004	4701184	03/11/2011
Patent Cooperation Treaty	Medical Device System	PCT/US2004/36218	10/29/2004		
Canada	User Interface Improvements for Medical Devices	2823049	04/01/2006		
European Patent Convention	User Interface Improvements for Medical Devices	06740911.0	04/01/2006		
European Patent Convention	User Interface Improvements for Medical Devices	08860942.5	12/15/2008		
Japan	User Interface Improvements for Medical Devices	2011-288309	12/28/2011		
Patent Cooperation Treaty	User Interface Improvements for Medical Devices	PCT/US2006/13735	04/01/2006		
Patent Cooperation Treaty	User Interface Improvements for Medical Devices	PCT/US2008/86824	12/15/2008		
Australia	System And Method For Improved Low Flow Medical Pump Delivery	2007286645	08/23/2007		
Canada	System And Method For Improved Low Flow Medical Pump Delivery	2661745	08/25/2006		
Patent Cooperation Treaty	System And Method For Improved Low Flow Medical Pump Delivery	PCT/US2005/10010	03/23/2005		
Patent Cooperation Treaty	System And Method For Improved Low Flow Medical Pump Delivery	PCT/US2007/76636	08/23/2007		

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Treaty					
United States	Pump Cassette	29/190393	09/19/2003		
Austria	Pump Cassette	000156625	03/17/2004	0001566250001	03/17/2004
Benelux	Pump Cassette	000156625	03/17/2004	0001566250001	03/17/2004
Canada	Pump Cassette	106279	03/18/2004	106279	05/18/2005
Denmark	Pump Cassette	000156625	03/17/2004	0001566250001	03/17/2004
European Community Design	Pump Cassette	000156625	03/17/2004	0001566250001	03/17/2004
Finland	Pump Cassette	000156625	03/17/2004	0001566250001	03/17/2004
France	Pump Cassette	000156625	03/17/2004	0001566250001	03/17/2004
Germany	Pump Cassette	000156625	03/17/2004	0001566250001	03/17/2004
Great Britain	Pump Cassette	000156625	03/17/2004	0001566250001	03/17/2004
Greece	Pump Cassette	000156625	03/17/2004	0001566250001	03/17/2004
Ireland	Pump Cassette	000156625	03/17/2004	0001566250001	03/17/2004
Italy	Pump Cassette	000156625	03/17/2004	0001566250001	03/17/2004
Portugal	Pump Cassette	000156625	03/17/2004	0001566250001	03/17/2004
Spain	Pump Cassette	000156625	03/17/2004	0001566250001	03/17/2004
Sweden	Pump Cassette	000156625	03/17/2004	0001566250001	03/17/2004

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United States	Medication Management System	60/509404	10/07/2003		
United States	Medication Management System	60/527583	12/05/2003		
European Patent Convention	Medication Management System	04794684.3	10/07/2004		
European Patent Convention	Medication Management System	07113998.4	10/07/2004		
European Patent Convention	Medication Management System	10182242.7	10/07/2004		
European Patent Convention	Medication Management System	10182287.2	10/07/2004		
European Patent Convention	Medication Management System	10182326.8	10/07/2004		
Patent Cooperation Treaty	Medication Management System	PCT/US2004/33409	10/07/2004		
United States	Medication Management System	10/783641	02/20/2004		
United States	Medication Management System	10/783649	02/20/2004		
United States	Medication Management System	10/783573	02/20/2004		
United States	Medication Management System	10/783648	02/20/2004		
United States	Medication Management System	10/783792	02/20/2004		
United States	Medication Management System	12/361215	01/28/2009		
United States	Medication Management System	12/639485	12/16/2009		
United States	System for Maintaining Drug Information and Communicating with Medication Delivery Devices	60/519646	11/13/2003		
United States	System for Maintaining Drug Information and Communicating with Medication Delivery Devices	60/527550	12/05/2003		

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European Patent Convention	System for Maintaining Drug Information and Communicating with Medication Delivery Devices	04810890.6	11/12/2004		
European Patent Convention	System for Maintaining Drug Information and Communicating with Medication Delivery Devices	06120773.4	11/12/2004		
European Patent Convention	System for Maintaining Drug Information and Communicating with Medication Delivery Devices	10184141.9	11/12/2004		
Patent Cooperation Treaty	System for Maintaining Drug Information and Communicating with Medication Delivery Devices	PCT/US2004/37900	11/12/2004		
Australia	Syringe Holding System	2006332865	12/21/2006	2006332865	05/31/2012
Canada	Syringe Holding System	2635539	12/21/2006		
European Patent Convention	Syringe Holding System	06845971.8	12/21/2006		
Patent Cooperation Treaty	Syringe Holding System	PCT/US2006/48892	12/21/2006		
United States	Medication Administration And Management System And Method	60/786599	03/28/2006		
Australia	Medication Administration And Management System And Method	2007245050	03/28/2007	2007245050	12/20/2012
Australia	Medication Administration And Management System And Method	2012261518	11/30/2012	2012261518	12/20/2012
Canada	Medication Administration And Management System And Method	2647816	03/28/2007		
European Patent Convention	Medication Administration And Management System And Method	07754303.1	03/28/2007		
Japan	Medication Administration And Management System And Method	2012156150	07/12/2012		
Japan	Medication Administration And Management System And Method	JP2009502993T	03/28/2007		
Patent Cooperation Treaty	Medication Administration And Management System And Method	PCT/US2007/07761	03/28/2007		

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
United States	Medication Administration And Management System And Method	11/692630	03/28/2007		
United States	Medication Administration And Management System And Method	11/692805	03/28/2007		
United States	Medication Administration And Management System And Method	11/692852	03/28/2007		
United States	System And Method For Comparing And Utilizing Activity Information And Configuration Information From Multiple Medical Device Management Systems	60/851971	10/16/2006		
Australia	System And Method For Comparing And Utilizing Activity Information And Configuration Information From Multiple Medical Device Management Systems	2007317669	10/16/2007		
European Patent Convention	System And Method For Comparing And Utilizing Activity Information And Configuration Information From Multiple Medical Device Management Systems	07868461.0	10/16/2007		
Japan	System And Method For Comparing And Utilizing Activity Information And Configuration Information From Multiple Medical Device Management Systems	JP20090533485T	10/16/2007		
Patent Cooperation Treaty	System And Method For Comparing And Utilizing Activity Information And Configuration Information From Multiple Medical Device Management Systems	PCT/US2007/81549	10/16/2007		
United States	System And Method For Comparing And Utilizing Activity Information And Configuration Information From Multiple Medical Device Management Systems	11/873269	10/16/2007		
Australia	System And Method For Sequencing Channels In A Multil-Channel Infusion Pump	2008221328	02/28/2008		
Canada	System And Method For Sequencing Channels In A Multil-Channel Infusion Pump	2678712	02/28/2008		
European Patent Convention	System And Method For Sequencing Channels In A Multil-Channel Infusion Pump	08730940.7	02/28/2008		
Japan	System And Method For Sequencing Channels In A Multil-Channel Infusion Pump	JP2009551843T	02/28/2008		
Patent Cooperation Treaty	System And Method For Sequencing Channels In A Multil-Channel Infusion Pump	PCT/US2008/55265	02/28/2008		

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United States	System And Method For Sequencing Channels In A Multil-Channel Infusion Pump	60/892085	02/28/2007		
United States	Radially Sealing Valve For An Infusion Set	60/969237	08/31/2007		
Patent Cooperation Treaty	Radially Sealing Valve For An Infusion Set	PCT/US2008/74729	08/29/2008		
United States	System And Method For Reducing Air Bubbles In A Fluid Delivery Line	60/957024	08/21/2007		
Australia	System And Method For Reducing Air Bubbles In A Fluid Delivery Line	2008288910	08/21/2008	2008288910	03/25/2013
Australia	System And Method For Reducing Air Bubbles In A Fluid Delivery Line	2013201483	03/13/2013	2013201483	08/22/2013
Canada	System And Method For Reducing Air Bubbles In A Fluid Delivery Line	2695376	08/21/2008		
European Patent Convention	System And Method For Reducing Air Bubbles In A Fluid Delivery Line	08827804.9	08/21/2008		
Japan	System And Method For Reducing Air Bubbles In A Fluid Delivery Line	JP2010522016	08/21/2008		
Patent Cooperation Treaty	System And Method For Reducing Air Bubbles In A Fluid Delivery Line	PCT/US2008/73828	08/21/2008		
United States	System And Method For Synchronizing Medication Configuration Information Among Systems Containing Medication Configuration Information	60/986968	11/09/2007		
Patent Cooperation Treaty	System And Method For Synchronizing Medication Configuration Information Among Systems Containing Medication Configuration Information	PCT/US2008/82581	11/06/2008		
United States	Differential Pressure Based Flow Sensor Assembly For Medication Delivery Monitoring And Method Of Using The Same	61/014298	12/17/2007		
Australia	Differential Pressure Based Flow Sensor Assembly For Medication Delivery Monitoring And Method Of Using The Same	2008338449	12/17/2008		
Canada	Differential Pressure Based Flow Sensor Assembly For Medication Delivery Monitoring And Method Of Using The Same	2708814	12/17/2008		

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	Same				
European Patent Convention	Differential Pressure Based Flow Sensor Assembly For Medication Delivery Monitoring And Method Of Using The Same	08862090.1	12/17/2008		
European Patent Convention	Differential Pressure Based Flow Sensor Assembly For Medication Delivery Monitoring And Method Of Using The Same	12172898.4	12/17/2008		
Japan	Differential Pressure Based Flow Sensor Assembly For Medication Delivery Monitoring And Method Of Using The Same	JP2010539718T	12/17/2008		
Patent Cooperation Treaty	Differential Pressure Based Flow Sensor Assembly For Medication Delivery Monitoring And Method Of Using The Same	PCT/US2008/87067	12/17/2008		
United States	Infusion Pump With Configurable Screen Settings	61/014660	12/18/2007		
Patent Cooperation Treaty	Infusion Pump With Configurable Screen Settings	PCT/US2008/87393	12/18/2008		
United States	User Interface Improvements For Medical Devices	61/014677	12/18/2007		
Patent Cooperation Treaty	User Interface Improvements For Medical Devices	PCT/US2008/87484	12/18/2008		
United States	Automated Point of Care Fluid Testing Device and Method of Using the Same	61/051572	05/08/2008		
United States	Automated Point of Care Fluid Testing Device and Method of Using the Same	61/238284	08/31/2009		
Australia	Automated Point of Care Fluid Testing Device and Method of Using the Same	2009244252	05/07/2009		
Australia	Automated Point of Care Fluid Testing Device and Method of Using the Same	2010286555	08/27/2010		
Canada	Automated Point of Care Fluid Testing Device and Method of Using the Same	2723379	05/07/2009		
Canada	Automated Point of Care Fluid Testing Device and Method of Using the Same	2770335	08/27/2010		

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European Patent Convention	Automated Point of Care Fluid Testing Device and Method of Using the Same	09743631.5	05/07/2009		
European Patent Convention	Automated Point of Care Fluid Testing Device and Method of Using the Same	10812636.8	08/27/2010		
Patent Cooperation Treaty	Automated Point of Care Fluid Testing Device and Method of Using the Same	PCT/US2009/43084	05/07/2009		
Patent Cooperation Treaty	Automated Point of Care Fluid Testing Device and Method of Using the Same	PCT/US2010/46901	08/27/2010		
United States	Cassette For Differential Pressure Based Medication Delivery Flow Sensor Assembly For Medication Delivery Monitoring And Method Of Making The Same	61/055605	05/23/2008		
Patent Cooperation Treaty	Cassette For Differential Pressure Based Medication Delivery Flow Sensor Assembly For Medication Delivery Monitoring And Method Of Making The Same	PCT/US09/44827	05/21/2009		
United States	System And Method For Authorized Medication Delivery	61/142704	01/06/2009		
United States	Cassette For Use In A Medication Delivery Flow Sensor Assembly And Method Of Making The Same	61/093630	09/02/2008		
Patent Cooperation Treaty	Cassette For Use In A Medication Delivery Flow Sensor Assembly And Method Of Making The Same	PCT/US2009/44841	05/21/2009		
United States	Cassette for Differential Pressure Based Medication Delivery Flow Sensor Assembly for Medication Delivery Monitoring and Method of Making the Same	61/148786	01/30/2009		
Japan	Cassette for Differential Pressure Based Medication Delivery Flow Sensor Assembly for Medication Delivery Monitoring and Method of Making the Same	2011547908	05/21/2009		
Patent Cooperation Treaty	Cassette for Differential Pressure Based Medication Delivery Flow Sensor Assembly for Medication Delivery Monitoring and Method of Making the Same	PCT/US2009/44823	05/21/2009		
United States	Occlusion Detection System	61/154033	02/20/2009		
Australia	Occlusion Detection System	2010215973	02/19/2010		

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
Canada	Occlusion Detection System	2752616	02/19/2010		
European Patent Convention	Occlusion Detection System	10744325.1	02/19/2010		
Japan	Occlusion Detection System	2011551229	02/19/2010		
Patent Cooperation Treaty	Occlusion Detection System	PCT/US2010/24645	02/19/2010		
United States	System and Method for Configuring a Rule Set for Medical Event Management and Responses	61/170205	04/17/2009		
Patent Cooperation Treaty	System and Method for Configuring a Rule Set for Medical Event Management and Responses	PCT/US2010/31351	04/16/2010		
Patent Cooperation Treaty	Improved Touch Screen System, Navigation and Programming Methods for Infusion Pump (SYMBIQ/SIMBA)	PCT/US2010/58386	11/30/2010		
United States	Systems and Methods for Managing and Delivering Patient Therapy through Electronic Drug Delivery Systems	61/287579	12/17/2009		
Patent Cooperation Treaty	Systems and Methods for Managing and Delivering Patient Therapy through Electronic Drug Delivery Systems	PCT/US2010/61127	12/17/2010		
United States	Fluid Flow Rate Compensation System Using an Integrated Conductivity Sensor to Monitor Tubing Changes	61/357660	06/23/2010		
Patent Cooperation Treaty	Fluid Flow Rate Compensation System Using an Integrated Conductivity Sensor to Monitor Tubing Changes	PCT/US2011/41559	06/23/2011		
United States	Method of Varying the Flow Rate of Fluid from a Medical Pump and Hybrid Sensor System Performing the Same	61/370962	08/05/2010		
Patent Cooperation Treaty	Method of Varying the Flow Rate of Fluid from a Medical Pump and Hybrid Sensor System Performing the Same	PCT/US2011/46375	08/03/2011		
United States	Medical Identification System and Method of Identifying Individuals, Medical Items, and Associations Therebetween using Same	61/411563	11/09/2010		

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
Patent Cooperation Treaty	Medical Identification System and Method of Identifying Individuals, Medical Items, and Associations Therebetween using Same	PCT/US2011/59886	11/09/2011		
United States	Fluid Delivery Device Identification and Loading System	61/426348	12/22/2010		
Japan	Fluid Delivery Device Identification and Loading System	2013-546418	12/22/2011		
Patent Cooperation Treaty	Fluid Delivery Device Identification and Loading System	PCT/US2011/66808	12/22/2011		
United States	Ultrasonic Monitoring Device for Measuring Physiological Parameters of a Mammal	61/437047	01/28/2011		
European Patent Convention	Ultrasonic Monitoring Device for Measuring Physiological Parameters of a Mammal	12739265.2	01/27/2012		
Patent Cooperation Treaty	Ultrasonic Monitoring Device for Measuring Physiological Parameters of a Mammal	PCT/US2012/22850	01/27/2012		
United States	Flow Stop Protective Means for a Fluid Delivery Device of a Medical Pump	61/503411	06/30/2011		
Canada	Flow Stop Protective Means for a Fluid Delivery Device of a Medical Pump	2838261	07/02/2012		
European Patent Convention	Flow Stop Protective Means for a Fluid Delivery Device of a Medical Pump	12804922.8	07/02/2012		
Patent Cooperation Treaty	Flow Stop Protective Means for a Fluid Delivery Device of a Medical Pump	PCT/US2012/45198	07/02/2012		
United States	Automated Blood Sampling System and Method	61/509783	07/20/2011		
Australia	Automated Blood Sampling System and Method	2012283881	07/20/2012		
European Patent Convention	Automated Blood Sampling System and Method	12815174.3	07/20/2012		
Patent Cooperation Treaty	Automated Blood Sampling System and Method	PCT/US2012/47553	07/20/2012		

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United States	Automated Blood Sampling System and Method	13/552868	07/19/2012		
United States	Systems and Methods for a Graphical Interface including a Graphical Representation of Medical Data	61/525418	08/19/2011		
Patent Cooperation Treaty	Systems and Methods for a Graphical Interface including a Graphical Representation of Medical Data	PCT/US2012/51300	08/17/2012		
United States	Pattern Recognition System and Method for the Detection of Stuck Fluid Droplets in a Fluid Delivery Line of an Infusion System	61/525587	08/19/2011		
Patent Cooperation Treaty	Pattern Recognition System and Method for the Detection of Stuck Fluid Droplets in a Fluid Delivery Line of an Infusion System	PCT/US2012/51356	08/17/2012		
United States	Froth Detection System and Method	61/460766	09/30/2011		
Patent Cooperation Treaty	Froth Detection System and Method	PCT/US2012/57878	09/28/2012		
United States	Intravenous Flow Rate Controller	61/541709	09/30/2011		
Australia	Intravenous Flow Rate Controller	2012315661	09/28/2012		
Australia	Intravenous Flow Rate Controller	2012336307	09/28/2012		
Canada	Intravenous Flow Rate Controller	2848128	09/28/2012		
Canada	Intravenous Flow Rate Controller	2848774	09/28/2012		
European Patent Convention	Intravenous Flow Rate Controller	12837195.2	09/28/2012		
European Patent Convention	Intravenous Flow Rate Controller	12848225.4	09/28/2012		
Patent Cooperation Treaty	Intravenous Flow Rate Controller	PCT/US2012/058072	09/28/2012		

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Patent Cooperation Treaty United States	Intravenous Flow Rate Controller	PCT/US2012/58063	09/28/2012		
	Medical Device Update System	61/549826	10/21/2011		
Patent Cooperation Treaty United States	Medical Device Update System	PCT/US2012/61055	10/19/2012		
	System for Monitoring and Delivering Medication to a Patient and Method of Using the Same to Minimize the Risks Associated with Automated Therapy	61/576407	12/16/2011		
Patent Cooperation Treaty United States	System for Monitoring and Delivering Medication to a Patient and Method of Using the Same to Minimize the Risks Associated with Automated Therapy	PCT/US2012/69730	12/14/2012		
	Air Detection System and Method for Detecting Air in a Pump of an Infusion System	61/618129	03/30/2012		
Patent Cooperation Treaty United States	Air Detection System and Method for Detecting Air in a Pump of an Infusion System	PCT/US2013/34041	03/27/2013		
	Patient Care System for Critical Medications	61/677736	07/31/2012		
Patent Cooperation Treaty United States	Patient Care System for Critical Medications	PCT/US2013/52937	07/31/2013		
	Symbiq Plunger Bump Detection Algorithm and Implementation	61/698636	09/08/2012		
United States	Apparatus and Method of Mitigating Free Flow in a Fluid Administration Set	61/720095	10/30/2012		
United States	Fluid Flow Passage to Improve Air-in-Line Detection	61/719739	10/29/2012		
Patent Cooperation Treaty United States	Fluid Flow Passage to Improve Air-in-Line Detection	PCT/US2013/67320	10/29/2013		
	Medical Device Communication Method	61/773647	03/06/2013		

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
Patent Cooperation Treaty United States	Medical Device Communication Method	PCT/US2014/21335	03/06/2014		
	Infusion System and Method of Use which Prevents Over-Saturation of an Analog-to-Digital Converter	61/828408	05/29/2013		
Patent Cooperation Treaty United States	Infusion System and Method of Use which Prevents Over-Saturation of an Analog-to-Digital Converter	PCT/US2014/39986	05/29/2014		
	Multi-Sensor Infusion System for Detecting Air or an Occlusion in the Infusion System	61/827111	05/24/2013		
Patent Cooperation Treaty United States	Multi-Sensor Infusion System for Detecting Air or an Occlusion in the Infusion System	PCT/US2014/39347	05/23/2014		
	Infusion System which Utilizes One or More Sensors and Additional Information to Make an Air Determination Regarding the Infusion System	61/828522	05/29/2013		
Patent Cooperation Treaty United States	Infusion System which Utilizes One or More Sensors and Additional Information to Make an Air Determination Regarding the Infusion System	PCT/US2014/40022	05/29/2014		
	System and Method of Monitoring and Managing a Remote Infusion Regimen	61/872333	08/30/2013		
Patent Cooperation Treaty United States	System and Method of Monitoring and Managing a Remote Infusion Regimen	PCT/US2014/053440	08/29/2014		
	Fail-Safe Drug Infusion Therapy System	61/880656	09/20/2013		
Patent Cooperation Treaty United States	Fail-Safe Drug Infusion Therapy System	PCT/US2014/056531	09/19/2014		
	Thermal Management System and Method for Medical Devices	61/902495	11/11/2013		
United States	Medical Device System for Performance Index	61/902504	11/11/2013		
United States	Infusion Pump Automation System and Method	61/906181	11/19/2013		

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
Patent Cooperation Treaty United States	Infusion Pump Automation System and Method	PCT/US2014/066379	11/19/2014		
United States	Door Mount Stabilization System for an Infusion Pump	61/916463	12/16/2013		
United States	Door Mount Stabilization System for an Infusion Pump	61/917239	12/17/2013		
Patent Cooperation Treaty United States	Door Mount Stabilization System for an Infusion Pump	PCT/US2014/070641	12/16/2014		
United States	Infusion Pump Battery Capacity Management and Battery Charge Alert System and Method	61/928305	01/16/2014		
Patent Cooperation Treaty United States	Infusion Pump Battery Capacity Management and Battery Charge Alert System and Method	PCT/US2015/011848	01/16/2015		
United States	Infusion System and Method which Utilizes Dual Wavelength Optical Air-in-Line Detection	61/946031	02/28/2014		
Patent Cooperation Treaty United States	Infusion System and Method which Utilizes Dual Wavelength Optical Air-in-Line Detection	PCT/US2015/018113	02/27/2015		
United States	Patient Care System with Conditional Alarm Forwarding	61/986562	04/30/2014		
Patent Cooperation Treaty United States	Patient Care System with Conditional Alarm Forwarding	PCT/US2015/028551	04/30/2015		
United States	Infusion System And Pump With Configurable Closed Loop Delivery Rate Catch-Up	62/004688	05/29/2014		
Patent Cooperation Treaty United States	Infusion System And Pump With Configurable Closed Loop Delivery Rate Catch-Up	PCT/US2015/033345	05/29/2015		
United States	Intravenous Pole Integrated Power, Control, and Communication System and Method for an Infusion Pump	62/038684	08/18/2014		
United States	System for Monitoring and Delivering Medication to a Patient and Method of Using the Same to Minimize the Risks Associated with Automated Therapy	62/012756	06/16/2014		

Jurisdiction	Title	App. No.	App. Date	Patent No.	Grant Date
Patent Cooperation Treaty	System for Monitoring and Delivering Medication to a Patient and Method of Using the Same to Minimize the Risks Associated with Automated Therapy	PCT/US2015/036058	06/16/2015		
United States	Infusion Pump Error Display	62/019198	06/30/2014		
United States	Matching Delayed Infusion Auto-Programs with Manually Entered Infusion Programs	62/050536	09/15/2014		
United States	Infusion Pump Battery Charge Alert System	62/089691	12/09/2014		
United States	Infusion System with Concurrent TPN/Insulin Infusion	62/094552	12/19/2014		
United States	Unique Plum Cassette Programming Features For Infusion Pump	62/127076	03/02/2015		
United States	Infusion Pump System And Method With Multiple Drug Library Editor Source Capability	62/166381	05/26/2015		
United States	Disposable Infusion Fluid Delivery Device For Programmable Large Volume Drug Delivery	62/166422	05/26/2015		

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SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
DIRECCIÓN DE NUEVAS CREACIONES

E. S. D.

Ref.: Expediente No. **NC2018/0014101**

Solicitud de patente de invención a nombre de **ICU MEDICAL, INC.**

1. Yo, CAROLINA DAZA MONTALVO, identificada como aparece al pie de mi firma, domiciliada en la Carrera 11 No. 86-53, piso 3º, obrando como apoderada de la solicitante, **ICU MEDICAL, INC.**, atentamente me permito presentar con este escrito los siguientes documentos:

1.1. Documento en el que consta la cesión de derechos de los cuatro (4) inventores; Tamas R. BAN; Jeffrey Donald MERWIN; Ion Vergil NICOLAESCU y Gary David SHUBINSKY a favor de la sociedad HOSPIRA, INC.

1.2. Documento en el que consta la Cesión de Derechos de Patentes, por parte de la sociedad HOSPIRA, INC., a favor de de la sociedad solicitante ICU MEDICAL, INC.

2. Solicito amablemente a ese Despacho tener en cuenta los documentos que se presentan con este escrito, con el fin de completar esta solicitud y continuar con el trámite de la misma.

Señor Director,



CAROLINA DAZA MONTALVO

C.C. 66.783.790 de Palmira Valle

TP-141563 CSJ

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