

2/24/04

02-26-2004

U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

Form PTO-1594
(Rev. 10/02)
OMB No. 0651-0027 (exp. 6/30/2005)
Tab settings



102678028

To the Honorable Commissioner, See the attached original documents or copy thereof.

1. Name of conveying party(ies):
Ropintasco Holdings, L.P.

Individual(s) Association
 General Partnership Limited Partnership
 Corporation-State
 Other _____

Additional name(s) of conveying party(ies) attached? Yes No

2. Name and address of receiving party(ies)
Name: JPMorgan Chase Bank
Internal
Address: _____
Street Address: 1111 Fannin Street, 10th FL
City: Houston State: Texas Zip: 77002

Individual(s) citizenship _____
 Association _____
 General Partnership _____
 Limited Partnership _____
 Corporation-State New York
 Other _____

If assignee is not domiciled in the United States, a domestic representative designation is attached: Yes No
 (Designations must be a separate document from assignment)
 Additional name(s) & address(es) attached? Yes No

3. Nature of conveyance:
 Assignment Merger
 Security Agreement Change of Name
 Other _____

Execution Date: February 6, 2004

4. Application number(s) or registration number(s):
 A. Trademark Application No.(s)
[See attached list.]

B. Trademark Registration No.(s)
[See attached list.]

Additional number(s) attached Yes No

5. Name and address of party to whom correspondence concerning document should be mailed:
 Name: Alston & Bird LLP
 Internal Address: Jay E. Sloman

 Street Address: 1201 West Peachtree Street

 City: Atlanta State: GA Zip: 30309

6. Total number of applications and registrations involved: 144

7. Total fee (37 CFR 3.41)..... \$3,615.00
 Enclosed
 Authorized to be charged to deposit account _____

8. Deposit account number: _____
 (Attach duplicate copy of this page if paying by deposit account)

FEB 24 AM 8:07
OFFR/FINANCE

DO NOT USE THIS SPACE

9. Statement and signature.
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Jay E. Sloman Jay E. Sloman Feb 17 2004
 Name of Person Signing Signature Date

02/25/2004 DBYRNE 00000002 78175086
 01 FC:8521 40.00 OP
 02 FC:8522 3575.00 OP

Total number of pages including cover sheet, attachments, and document: 49
 Mail documents to be recorded with required cover sheet information to:
 Commissioner of Patent & Trademarks, Box Assignments
 Washington, D.C. 20231

Applications

Mark	Serial Number
CHEMI-PRO	US 78/175,086
VERNIGAP	US 78/155,392
GATAN AND DESIGN	US 76/532,632
FTI FLOW TECHNOLOGY	US 76/509,226
VIBRA-CHECK	US 76/430,370
Design logo	US 76/373,672

Registrations

Mark	Registration Number
DATAWATCH	US 988,370
VIBRO-GUARD	US 978,112
CORNELL	US 927,225
AMOT	US 662,217
PEXTO	US 642,880
MEGAPLUS	US 2,963,026
MOTIONXTRA	US 2,779,933
VANTAGE	US 2,765,643
LITHOSOURCE	US 2,760,286
INSPECTRUM	US 2,753,182
TRAINWARE	US 2,740,296
THE GATAN MICROSCOPY SUITE	US 2,737,851
VANGUARD	US 2,735,607
Food Pump product configuration (volute design)	US 2,731,452
IMAGEPROSHOP.COM	US 2,721,201
MOTION PRO	US 2,701,279
SHARPSTACK	US 2,678,969
SPECTRAPRO	US 2,668,979
SURELINK	US 2,665,301
CASCADE	US 2,652,707
RL	US 2,645,227
3D CONSTRUCTOR	US 2,644,815
DIGITALMONTAGE	US 2,635,624
PREX	US 2,630,611
SPRINT-LC	US 2,627,632
SPRINT-GT	US 2,627,631
SPRINT	US 2,627,630
MOTION METER	US 2,613,002
FIRST LIGHT	US 2,610,680
PI MAX	US 2,606,570
PHOTOMETRICS	US 2,606,444

MEDIA CYBERNETICS	US 2,604,215
DUALVISION	US 2,595,316
ENFINA	US 2,589,739
PROTECTIVE MAINTENANCE	US 2,587,573
RELIANT	US 2,576,636
FTI FLOW TECHNOLOGY	US 2,529,730
ULTRASCAN	US 2,523,089
PI-SX	US 2,519,332
GUARDIAN	US 2,506,175
TRAINTOOLS	US 2,500,290
ARRAY-PRO	US 2,493,291
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VERSARRAY	US 2,469,235
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SPEC-10	US 2,442,424
PI-SCX	US 2,442,423
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VECTOR	US 2,439,800
ROPER SCIENTIFIC BEYOND IMAGING and design	US 2,426,766
ROC	US 2,403,372
IDI PUMPLESS PUMPS	US 2,392,537
MSC	US 2,355,891
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WOIS	US 2,279,007
REDLAKE	US 2,262,561
TRICKLEMETER	US 2,239,421
SCOPE-PRO	US 2,232,007
CHEMLINK	US 2,216,753
H LOGO	US 2,212,130
SENSYS	US 2,205,455
CYCLOSEAL	US 2,202,607
REDI-PRIME	US 2,202,606
SONDicator	US 2,200,822
QUANTIX	US 2,198,209
FMI	US 2,197,196
ROPAK	US 2,195,471
ROPER PUMPS (with design)	US 2,158,554

ROPER	US 2,138,384
AUTOFILTER	US 2,137,724
IMAGE-PRO	US 2,131,634
FLOWDATA	US 2,126,553
FLOWDATA	US 2,124,821
FUELCOM SYSTEM	US 2,109,790
FLOWDATA	US 2,104,730
UNIPROX	US 2,099,358
STAGE-PRO	US 2,096,752
MATERIALS-PRO	US 2,096,751
BIOFILTER	US 2,092,018
FUELCOM	US 2,086,407
DESIGN ONLY	US 2,060,883
MOTIONSCOPE	US 2,022,061
MULTISCAN	US 2,020,742
FROST WATCH	US 2,015,480
PRINTS-PRO	US 2,015,261
HALO	US 2,002,968
GEL-PRO	US 2,001,361
MAPS	US 1,991,855
TTC TOTAL TRAIN CONTROL (and design)	US 1,981,381
PLUS POINT DESIGN	US 1,976,585
PVCAM	US 1,975,659
TOTAL TRAIN CONTROL	US 1,947,736
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TTC	US 1,929,948
TESTRA	US 1,928,641
AUTO-PURGER	US 1,921,691
IMAGEPOINT	US 1,919,469
SEE-LEVEL	US 1,904,291
PXL	US 1,840,134
LONG NECK	US 1,836,424
LEVEL CAT	US 1,805,938
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OPTIMAS	US 1,682,682
FROST MASTER	US 1,609,685
MEDIA CYBERNETICS (and red triangle logo)	US 1,600,441

AUTO-PURGER	US 1,579,636
METACHROME	US 1,561,690
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RATIO:MATIC	US 1,551,700
NAUTILUS	US 1,537,932
VARI LEVEL	US 1,492,070
VIBRALERT	US 1,458,084
VIBRALOG	US 1,418,254
RECYCLE TRIP	US 1,398,133
SAFETY ON	US 1,398,132
AIR MISER	US 1,396,559
PROFAB	US 1,356,248
SPRINT	US 1,338,818
FMI MICRO <PI>-PETTER	US 1,318,969
RW	US 1,292,652
ROPER	US 1,272,427
(Design)	US 1,221,255

GRANT OF SECURITY INTEREST

THIS GRANT OF SECURITY INTEREST, dated as of February 6, 2004 is executed by Ropintasco Holdings, L.P., a Delaware limited partnership ("Debtor"), in favor of JPMorgan Chase Bank, as Administrative Agent ("Secured Party").

A. Pursuant to a Credit Agreement dated as of December 29, 2003 (as amended, restated or otherwise modified from time to time, the "Credit Agreement") among Roper Industries, Inc. (the "Parent") and certain subsidiaries of the Parent (together with the Parent, the "Borrowers"), the Lenders, the Syndication Agent, the Documentation Agent and the Administrative Agent, each Lender has agreed to extend certain credit facilities to the Borrowers upon the terms and subject to the conditions set forth in the Credit Agreement. Unless otherwise defined herein, capitalized terms are used herein as defined in the Credit Agreement. Debtor has granted a security interest to Secured Party in certain assets of Debtor to secure Debtor's obligations under the Loan Documents pursuant to a Guarantee and Collateral Agreement dated as of December 29, 2003 between the Borrowers and Secured Party (as amended, modified or supplemented, the "Agreement").

B. Debtor has adopted, used and is using the trademarks, more particularly described on Schedule 1-A annexed hereto as part hereof, which trademarks are registered or subject to an application for registration in the United States Patent and Trademark Office (the "Trademarks");

C. Schedule 1-A hereof constitutes a complete list, as of the date hereof, of registrations or applications for registrations of Trademarks in or to which Debtor has any right, title, interest, claim or demand. After the date of the Agreement, the terms and provisions of which are hereby incorporated herein as if fully set forth herein, Debtor shall provide written notice to Secured Party, of any addition or change which is necessary to be made to Schedule 1-A in order to maintain such schedule completeness or accuracy.

D. Debtor owns the letters patent, and/or applications for letters patent, for the jurisdictions more particularly described on Schedule 1-B annexed hereto as part hereof, which patents are registered or subject to an application for registration in the United States Patent and Trademark Office (the "Patents");

E. Schedule 1-B hereof constitutes a complete list, as of the date hereof, of registrations or applications for registrations of Patents in or to which Debtor has any right, title, interest, claim or demand. After the date of the Agreement, the terms and provisions of which are hereby incorporated herein as if fully set forth herein, Debtor shall provide written notice to Secured Party, of any addition or change which is necessary to be made to Schedule 1-B in order to maintain such schedule completeness or accuracy.

F. Debtor has adopted, used and is using the copyrights, more particularly described on Schedule 1-C annexed hereto as part hereof, which copyrights are registered or subject to an application for registration in the United States Copyright Office (the "Copyrights");

G. Schedule 1-C hereof constitutes a complete list, as of the date hereof, of registrations or applications for registrations of Copyrights in or to which Debtor has any right, title, interest, claim or demand. After the date of the Agreement, the terms and provisions of which are hereby incorporated herein as if fully set forth herein, Debtor shall provide written notice to Secured Party, of any addition or change which is necessary to be made to Schedule 1-C in order to maintain such schedule completeness or accuracy.

H. Debtor hereby grants to Secured Party a security interest in all right, title and interest of Debtor in and to the Trademarks, Patents (including any reissue, continuation, continuation-in-part or extension thereof), and Copyrights, together with the goodwill of the business symbolized by the Trademarks, Patents (including any reissue, continuation, continuation-in-part or extension thereof) and Copyrights, and the applications and registrations thereof, including any and all causes of action which may exist by reason of infringement thereof (collectively, the "Collateral"), to secure the payment, performance and observance of the Obligations, as defined in the Agreement;

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, Debtor does hereby further grant to Secured Party a security interest in the Collateral to secure the prompt payment, performance and observance of the Obligations.

Debtor does hereby further acknowledge and affirm that the rights and remedies of Secured Party with respect to the security interest in the Collateral granted hereby are more fully set forth in the Agreement.

Secured Party's address is:

JPMorgan Chase Bank
1111 Fannin Street, 10th Floor
Houston, Texas 77002
Attention: Linda Escamilla

IN WITNESS WHEREOF, Debtor has caused this instrument to be executed as of the day and year first above written.

Ropintassco Holdings, L.P.

By: 

Name: ~~Martin Headley~~

Title: Vice President

PROTECTIVE MAINTENANCE	US 2,587,573	2-Jul-2002
RELIANT	US 2,576,636	4-Jun-2002
FTI FLOW TECHNOLOGY	US 2,529,730	15-Jan-2002
ULTRASCAN	US 2,523,089	25-Dec-2001
PI-SX	US 2,519,332	18-Dec-2001
GUARDIAN	US 2,506,175	13-Nov-2001
TRAIOTOOLS	US 2,500,290	23-Oct-2001
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PI-SCX	US 2,442,423	10-Apr-2001
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WOIS	US 2,279,007	21-Sep-1999
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FLOWDATA	US 2,126,553	6-Jan-1998
FLOWDATA	US 2,124,821	30-Dec-1997
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FLOWDATA	US 2,104,730	14-Oct-1997
UNIPROX	US 2,099,358	23-Sep-1997
STAGE-PRO	US 2,096,752	16-Sep-1997
MATERIALS-PRO	US 2,096,751	16-Sep-1997
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GEL-PRO	US 2,001,361	17-Sep-1996
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TESTRA	US 1,928,641	17-Oct-1995
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IMAGEPOINT	US 1,919,469	19-Sep-1995
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LONG NECK	US 1,836,424	10-May-1994
LEVEL CAT	US 1,805,938	23-Nov-1993
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MRPC	US 1,762,509	6-Apr-1993
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FMI	US 1,732,699	17-Nov-1992
PEELS	US 1,721,502	6-Oct-1992
WHISPERLOK	US 1,721,501	6-Oct-1992
HEXRING	US 1,717,630	22-Sep-1992
MRC	US 1,702,965	28-Jul-1992
TECHNI-LEVEL	US 1,698,909	7-Jul-1992
DIGITALMICROGRAPH	US 1,688,542	19-May-1992
OPTIMAS	US 1,682,682	14-Apr-1992
FROST MASTER	US 1,609,685	14-Aug-1990
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AUTO-PURGER	US 1,579,636	23-Jan-1990
METACHROME	US 1,561,690	24-Oct-1989
RATIO:MATIC (Stylized)	US 1,552,633	22-Aug-1989

RATIO:MATIC	US 1,551,700	15-Aug-1989
NAUTILUS	US 1,537,932	Abandoned
VARI LEVEL	US 1,492,070	14-Jun-1988
VIBRALERT	US 1,458,084	22-Sep-1987
VIBRALOG	US 1,418,254	25-Nov-1986
RECYCLE TRIP	US 1,398,133	17-Jun-1986
SAFETY ON	US 1,398,132	17-Jun-1986
AIR MISER	US 1,396,559	10-Jun-1986
PROFAB	US 1,356,248	27-Aug-1985
SPRINT	US 1,338,818	4-Jun-1985
FMI MICRO <PI>-PETTER	US 1,318,969	12-Feb-1985
RW	US 1,292,652	4-Sep-1984
ROPER	US 1,272,427	3-Apr-1984
(Design)	US 1,221,255	21-Dec-1982

FOREIGN AND COMMON LAW TRADEMARKS

Mark	Serial/ Registration Number	Filing/ Registration Date
AFA	common law	
IMAGE ENTERPRISE	common law	
POSI-PRIME	Common Law	
MOTION VANTAGE	common law	
MOTION PLUS	common law	
PRINCETON INSTRUMENTS	common law	
PHOTOMETRICS COOLSNAP	common law	
RS (and design)	common law	
FORENSYS	common law	
AURORA	common law	
IMAGE POINT PHOTOMETRICS	common law	
A2S	common law	
ARC	common law	
AUTO-PRO	common law	
CAMS	common law	
CAMTEST	common law	
COMMAND	common law	
COOLSNAFX	common law	
COOLSNAP	common law	
COOLSNAPCF	common law	
COOLSNAPHQ	common law	
DEFINITIVE IMAGING, LTD.	common law	
DI design	common law	
EVOLUTION	common law	
EXPRESS-SERIES CAMERA KIT	common law	
EXPRESS-SERIES CAPTURE KIT	common law	
FIRST LOOK	common law	
HLPS	common law	
IMAGING QUARTERLY	common law	
I-PENTAMAX	common law	
JFTOT	common law	
MCP BRACKET PULSING	common law	
MCRT	common law	
MODEL 4000	common law	
MODEL 4600	common law	
MOTION CENTRAL	common law	
NCL	common law	
OMAV	common law	

PI-MTE	common law	
PRIMARY POINT DIGITIZATION (PPD)	common law	
PROGRAMMABLE TIMING GENERATOR (PTG)	common law	
PRO-SERIES CAMERA KIT	common law	
PRO-SERIES CAPTURE KIT	common law	
RS IMAGE	common law	
SERIES 300	common law	
SERIES 400	common law	
SPECTRACARD	common law	
SPECTRASENCE SPECTRASENSE	common law	
SPECTRUMM	common law	
THE AUTOMATED SOLUTION	common law	
THE INTEGRATED SOLUTION	common law	
THE PROVEN SOLUTION	common law	
UFTOT	common law	
VIRTUAL CHIP	common law	
VTR	common law	
XR 300	common law	
IMAGE-PRO	UK	18-Nov-1994
IMAGE-PRO	UK	6-Feb-1996
MSQ IMAGING SYSTEMS	Ohio 149846	
IMAGE-PRO	Korea	16-Jun-1998
REDLAKE	Japan 4,339,444	26-Nov-1999
IMAGE-PRO	Italy	30-Dec-1996
VARI-LEVEL	Great Britain 1,373,008	10-Feb-1989
IMAGE-PRO	Germany	26-Oct-1995
IMAGE-PRO	France	28-Apr-1995
REDLAKE	EU 950,477	28-Feb-2000
IMAGE-PRO	EU	5-May-2000
REDLAKE	Canada TMA535,746	25-Oct-2000
AUTO-PURGER	Canada 454,038	16-Feb-1996
VARI LEVEL	Canada 370,662	13-Jul-1990
IMAGE-PRO	Canada	24-Sep-2001
PHOTOMETRICS	Arizona 034448	29-Sep-1994
AUTO-PURGER	009376 (European Countries, China)	17-Oct-1994

SCHEDULE 1-B TO GRANT OF SECURITY INTEREST

U.S. PATENTS

Subject	Patent Number	Filing/Issue Date	Status
Apparatus and Methods for Improved Fluorescence Detectors	US 6,636,314 B1	filed 5/9/2000 issued 10/21/2003	
Vacuum Assisted Pump	US 6,616,427	9/9/2003	
Impact Transmitter for Reciprocating Machines	US 6,588,279	7/8/2003	
Vacuum Assisted Pump	US 6,575,706	6/10/2003	
Electron Image Detector Coupled by Optical Fibers with Absorbing Outer Cladding to Reduce Blurring	US 6,570,164	5/27/2003	
Liquid Dispensing System with Enhanced Filter	US 6,554,579	4/29/2003	
Method and Apparatus for Estimating Flow in Compressors with Sidestreams	US 6,503,048	1/7/2003	
Method and Apparatus for Antisurge Control of Turbochargers having Complex and Changing Surge Limit Lines	US 6,494,672	12/17/2002	
Method and Apparatus for Dispensing Fluids	US 6,478,547	11/12/2002	
Sealed Motor Driven Valve	US 6,460,567	10/8/2002	
Staged Oxidation Chamber for Enhanced Nitrogen and Sulfur Detection	US 6,458,328	10/1/2002	
Electron Image Detector Coupled by Optical Fibers with Absorbing Outer Cladding to Reduce Blurring	US 6,455,860	9/24/2002	
Methods for Improving Resolution and Reducing Noise in an Image Detector for an Electron Microscope	US 6,414,309	7/2/2002	

Subject	Patent Numbers	Filing/Issue Date	Status
Single Tilt and Rotation Cryotransfer Holder for Electron Microscopes	US 6,410,925	6/25/2002	
Vacuum Assisted Pump	US 6,409,478	6/25/2002	
Solid State Camera with Separate Vacuum And Sieve Chambers	US 6,388,710	5/14/2002	
Two-Axis Tiltable and Rotatable Specimen Holder	US 6,388,262	5/14/2002	
Method and Apparatus for Maximizing Productivity of a Natural Gas Liquids Production Plant	US 6,332,336	12/25/2001	Expires in 2019
Method and Apparatus for Estimating a Surge Limit Line for Configuring an Antisurge Controller	US 6,317,655	11/13/2001	Expires in 2019
Pump Deployment System	US 6,309,169	10/30/2001	
Modulating Expansion Valve	US 6,244,561	6/12/2001	
Rupture Disk Assembly	US 6,240,948	6/5/2001	
Spacial Non-Uniformity Correction of a Color Sensor	US 6,226,034	5/6/1997	
Method and Apparatus for Limiting a Critical Variable of a group of Compressors or an Individual Compressor	US 6,217,288	4/17/2001	Expires in 2018
Methods for Improving Resolution and Reducing Noise in an Image Detector for an Electron Microscope	US 6,194,719	2/27/2001	
Dual Stage Pump System with Prestressed Diaphragm and Reservoir	US 6,190,565	2/20/2001	
Automated Set Up of an Energy Filtering Transmission Electron Microscope	US 6,184,524	2/6/2001	

Subject	Patent Number	Filing/Issue Date	Status
Immersible Motor System	US 6,183,208	2/6/2001	
Improved Asymmetrically Split Charged Coupled Device	US 6,175,126	1/16/2001	
High Speed Increased Bandwidth Camera	US 6,160,578	5/18/1998	
Gear Pump Having an Inlet Port Aligned with the Drive Shaft	US 6,152,719	9/18/1997 11/28/2000	
Apparatus for Near Simultaneous Chemiluminescent Sulfur and Nitrogen Detection	US 6,143,245	11/7/2000	
Programmable Logic Controller Software with Embedded Class Logic and Alarm/Shutdown Functionality	US 6,141,628	10/31/2000	1-Jun-2018
Method and Apparatus for Electrohydraulic Control of a Steam Turbine System	US 6,116,258	9/12/2000	Expires in 2019
Dry Pit Submersible Pump Having a Fan and a Torque-Receiving Mechanism	US 6,079,958	6/27/2000	
Apparatus and Method for Improved Fluorescence Detectors	US 6,075,096(AIII)	6/13/2000	
Aeration System	US 6,074,554	6/13/2000	
Valve with Different Configurations for Different Uses	US 6,065,487	5/23/2000	13-Nov-2018
An L-C Low Pass Filter Correlator	US 6,055,016	4/25/2000	
Gas Flow Rate Measurement Apparatus and Method	US 6,053,054	8/25/2000	
Aeration System	US 6,036,434	3/14/2000	
Method for Calibrating a Multi-Channel Imaging System	US 6,005,614	3/19/1999 12/21/1999	Lapsed 12/22/2003 for failure to pay 4- yr. fee

Subject	Patent Number	Filing/Issue Date	Status
Method for Calibrating a Multi-Channel Imaging System	US 6,005,016	12/21/1999	
Improved Asymmetrically Split Charged Coupled Device	US 5,986,267	11/6/1997	
Refrigerant Thermostatic Valve	US 5,974,827	11/2/1999	2-Jul-2018
Method and Apparatus for Preventing Surge While Taking a Turbocompressor Off-Line from a Parallel Configuration	US 5,967,742	10/19/1999	Expires in 2017
Wedge Clamping Device for a Flat Plate/Printed Circuit Board	US 5,954,122	7/20/1999	Lapsed 09/22/2003 for failure to pay 4-yr. maintenance fee
Flexible Flower Indicator Mechanism	US 5,954,090	9/21/1999	14-Oct-2017
Method and Apparatus for Improving Antisurge Control of Turbocompressors by Reducing Control Valve Response Time	US 5,951,240	9/14/1999	Expires in 2017
Valve with Improved Combination Bearing Support and Seal	US 5,950,664	9/14/1999	18-Feb-2017
Method and Apparatus for Multiple Read-Out speeds for a CCD	US 5,946,033	8/31/1999	
Fast Readout of a Color Image Sensor	US 5,926,215	7/20/1999	Lapsed 07/21/2003 for failure to pay 4-yr. maintenance fee
Precision Etching and Coating System	US 5,922,179	7/13/1999	
Split White Balance Processing of a Color Image	US 5,917,556	6/29/1999	Lapsed 06/30/2003 for failure to pay 4-yr. maintenance fee
Methods for Near Simultaneous Chemiluminescent Sulfur and Nitrogen Detection	US 5,916,523	6/13/2000	

Subject	Patent Number	Filing/Issue Date	Status
Method and Apparatus for Antisurge Control for Turbocompressors having Surge Limit Lines with Small Slopes	US 5,908,462	6/1/1999	Expires in 2016
Apparatus and Method for Interfacing an Open Capillary and Detector for Conducting Off-Column Analyzers	US 5,888,363	3/30/1999	
Prevention of Parameter Excursions During Process Compressor Surge in Gas Turbines	US 5,879,133	4/21/1997 3/9/1999	Expires in 2017
System and Method Supporting Likeness Determination Using a GUI to Simplify Image Analysis	US 5,870,093	12-Jun-1996 9-Feb-1999	
Check Valve+E6	US 5,848,605	12/15/1998	
Leak Tester with Flexible Equation Capabilities	US 5,847,264	12/8/1998	
Temporal Filter Using Interline Charged Coupled Device	US 5,821,547	10/13/1998	
Apparatus with Off-Axis Light Path for Characterizing the Luminous Intensity of Lamp	US 5,818,571	10/6/1998	
Optically Coupled Large-Format Solid State Imaging Device	US 5,818,035	10/6/1998	
Spatially Mapped Monochrome Display in Color Image	US 5,815,159	3/22/1996 9/29/1998	Lapsed 09/30/2002 for failure to pay 4- yr. maintenance fee
Automated Set Up of an Energy Filtering Transmission Electron Microscope	US 5,798,524	8/25/1998	
Charge Coupled Device with Improved Coating	US 5,795,617	8/18/1998	

Subject	Patent Number	Filing/Issue Date	Status
Multi-Mode Imaging Apparatus for Radiation Emitting or Absorbing Samples	US 5,774,214	6/30/1998	
Dual Stage Pump System with Prestressed Diaphragm and Reservoir	US 5,762,795	6/9/1998	
Lens System for Maximizing Light Collection Efficiency and Transmission	US 5,760,974	6/2/1998	
Ultra-High Tilt Specimen Cryotransfer Holder	US 5,753,924	5/19/1998	
Prevention of Parameter Excursions in Gas Turbines	US 5,752,378	7/16/1996 5/19/1998	Expires in 2015
Method and Apparatus for Load Balancing Among Multiple Compressors	US 5,743,715	10/20/1995 4/28/1998	Expires in 2015
Apparatus and Method for Characterizing the Luminous Intensity of a Lamp Using a Curved Mirror and a Curved Screen	US 5,729,336	3/17/1998	
Hot Gas Expander Power Recovery and Control	US 5,699,267	3/3/1995 12/16/1997	Expires in 2015
Turbocharger Intercooler Control Means	US 5,669,363	9/23/1997	2-Apr-2016
CCD Dark Mean Level Correction Circuit Employing Digital Processing and Analog Subtraction Requiring No Advanced Knowledge of Dark Mean Level (Digital Black Clamp)	US 5,659,355	8/19/1997	
Precision-Controlled Slit Mechanism for Electron Microscope	US 5,640,012	6/17/1997	

Subject	Patent Number	Filing/Issue Date	Status
Resolution-Enhancement Device for an Optically-Coupled Image Sensor for an Electron	US 5,635,720	6/3/1997	
Method for Predicting and Using the Exhaust Gas Temperatures for Control of Two and Three Shaft Gas Turbines	US 5,622,042	2/27/1995 4/22/1997	Expires in 2015
An Imaging System Having a serial I/O Link Between Image Channels	US 5,613,156	3/18/1997	
Method and Apparatus for Overspeed Prevention Using Open-Loop Response	US 5,609,465	9/25/1995 3/11/1997	Expires in 2015
Method and Apparatus for Antisurge Control of Multistage Compressors with Sidestreams	US 5,599,161	11/3/1995/4/1997	Expires in 2015
Low Supply Voltage Shutter Driver	US 5,594,520	1/14/1997	
Aeration System	US 5,591,001	1/7/1997	
Portable Fuel Analyzer for the Diagnosis of Fuel-Related Problems On-Site at the Vehicle Service Bay	US 5,569,922		
Automatic Channel Gain and Offset Balance for Video Cameras Employing Multi-Channel Sensors	US 5,565,916	10/15/1996	
Frame Buffer Address Generator for the Multiple Format Display of Multiple Format Source Video	US 5,537,156	7/16/1996	
Wide Angle Camera for Transmission Electron	US 5,536,941	7/16/1996	
Filtering and Dispensing System	US 5,527,161	1/18/1996	

Subject	Patent Number	Filing/Issue Date	Status
Apparatus for Improved Image Resolution in Electron Microscopy	US 5,517,033	5/14/1996	
Variable-Size First in First Out Memory with Data Manipulation Capabilities	US 5,515,329	5/7/1996	
Method and Apparatus for Measuring the Distance of a Turbocompressor's Operating Point to the Surge Limit Interface	US 5,508,943	4/7/1994 4/16/1996	Expires in 2014
Modular Electronic Imaging System Which Accepts Replacement Solid State Images	US 5,493,332	2/20/1996	
Dual Stage Pump System with Prestressed Diaphragm and Reservoir	US 5,490,765	2/13/1996	
Impeller Pump with Vaned Backplate for Clearing Debris	US 5,489,187	2/6/1996	
Charge Coupled Device Array for Spectroscopy Detection	US 5,483,091	1/9/1996	
Video Signal Noise Suppression Circuit	US 5,475,427	12/12/1995	Lapsed 12/12/2003 for failure to pay 8-yr. maintenance fee
Specimen Holder and Apparatus for Two-Sided Ion Milling System	US 5,472,566	12/5/1995	
Ground Delay Line Correlator	US 5,467,103	11/14/1995	
Spectrographic Astigmatism Correction System	US 5,452,085	9/19/1995	Lapsed 09/20/1999 for failure to pay 4-yr. maintenance fee
Valve Handle and Method of Fastening Same to a Valve Stem	US 5,438,730	8/8/1995	Lapsed 08/08/2003 for failure to pay 8-yr. maintenance fee

Subject	Patent Number	Filing/Issue Date	Status
Charge Coupled Device for Spectroscopy Detection	US 5,432,335	7/11/1995	
Metal Particle Detector Apparatus for Non-conducting Fluid Systems	US 5,402,113	3/28/1995	30-Aug-2013
Electrical Access to a Hermetically Sealed Chamber Using a Printed Circuit Board	US 5,393,931	2/28/1995	
Charge-Coupled Device Camera with Voltage Adjustment Control	US 5,386,230	1/31/1995	
Transverse Filter Circuit	US 5,371,470	12/6/1994	
Load Sharing Method and Apparatus for Controlling a Main Gas Parameter of a Compressor Station with Multiple Dynamic Compressors	US 5,347,467	6/22/1992 9/13/1994	Expires in 2011
Charge-Coupled Device with Open Gate Structure	US 5,338,948	8/16/1994	
Apparatus and Method for Determining the Thermal Stability of Fluids	US 5,337,599	4/6/1992/8/16/1994	
Liquid Dispensing System	US 5,316,181	5/31/1994	
Autoadjusting Electron Microscope	US 5,300,776	4/5/1994	
Method for Measuring and Determining Nitrogen Content in a Sample and Providing an Output Data of Total Nitrogen and Selected Constituent Nitrogen Compounds Including Nitrate and Nitrite	US 5,300,441	4/5/1994	Lapsed 04/05/2002 for failure to pay 8-yr. maintenance fee
Visualization Techniques for Temporarily Acquired Sequences of Images	US 5,294,978	3/15/1994	Lapsed 03/15/2002 for failure to pay 8-yr. maintenance fee

Subject	Patent Number	Filing/Issue Date	Status
Micro Freeze Point Analysis	US 5,282,682	8/4/1992 2/1/1994	
Self Cleaning Reciprocating and/or Rotating Device on Roper Holdings, Inc. professional search	US 5,279,210 RE 35997	1/18/1994 12/22/1998	
Apparatus for Contouring a Semiconductor, Light Responsive Array with a Prescribed Physical Profile	US 5,252,850	10/13/1993	
Telephoto Sensor Trigger in a Solid State Motion Analysis System	US 5,251,027	10/5/1993	Lapsed 10/06/1997 for failure to pay 4- yr. maintenance fee
Valveless Metering Pump with Reciprocating, Rotating Piston	US 5,246,354	9/21/1993	
Method and Apparatus for Determining Hydrocarbon Fuel Properties	US 5,225,679		
Method and Apparatus for Quantifying Thermal Oxidation Tester Tube Deposits	US 5,223,718	8/10/1992 6/29/1993	
Total Sulfur Analyzer System Operative on Sulfur/Nitrogen Mixtures	US 5,152,963	10/6/1992	
CCD and Phosphor screen Digital Radiology Apparatus and Method for High Resolution Mammography	US 5,142,557	8/25/1992	
Micro Freeze Point Analysis Apparatus and Method	US 5,141,329	9/27/1990 8/25/1992	
Pre-Event/Post-Event Recording in a Solid State Fast Frame Recorder	US 5,140,436	8/18/1992	

Subject	Patent Number	Filing/Issue Date	Status
Hydrocarbon Analysis Based on Low Resolution Raman Spectral Analysis	US 5,139,334		
Solid State Imaging Apparatus with Fiber Optic Bundle	US 5,134,680	7/28/1992	
Solid State Exposure Meter	US 5,134,275	7/28/1992	
Apparatus for Determining the Thermal Stability of Fluids	US 5,101,658	6/4/1991 4/7/1992	
High Resolution Electron Energy Loss Spectrometer	US 5,097,126	3/17/1992	
Method of Making a Valveless Positive Displacement Pump including a Hinge for Angular Adjustment	US 5,092,037	3/3/1992	
Fluid Pressure Operated Indicating Relay	US 5,072,748	12/17/1991	Lapsed 12/17/1999 for failure to pay 8-yr. maintenance fee
Cooled CCD Camera for an Electron Microscope	US 5,065,029	11/12/1991	
Bellows-Type Dispensing Pump	US 5,061,156	10/29/1991	
Angular Adjustment Pump and Method for Adjusting the Flow Rate Thereof	US 5,044,889	9/3/1991	
Video Trigger in a Solid State Motion Analysis System	US 5,034,811	7/23/1991	Lapsed 07/23/2003 for failure to pay 12-yr. maintenance fee
Liquid Level Control System for Refrigeration Apparatus	US 5,031,068	7/9/1991	Lapsed 07/10/1995 for failure to pay 4-yr. maintenance fee
Valveless, Positive Displacement Pump including Hinge for Angular Adjustment	US 5,020,980	6/4/1991	

Subject	Patent Number	Filing/Issue Date	Status
Pump with Multi-Port Discharge	US 5,015,157	1/14/1991	
Chemically-Assisted Ion Beam Milling System for the Preparation of Transmission Electron Microscope Specimens	US 5,009,743	4/23/1991	
Specimen Heating Holder for Electron Microscopes	US 4,996,433	2/26/1991	Lapsed 02/26/2003 for failure to pay 12-yr. maintenance fee
Specimen Cooling Holder for Side Entry Transmission Electron Microscopes	US 4,950,901	8/21/1990	
Apparatus for Analysis of a Sample for Sulphur	US 4,950,456	8/21/1990	
Precision Liquid Dispenser	US 4,950,134	8/21/1990	27-Dec-2008
Method and Apparatus for Preventing Surge in a Dynamic compressor	US 4,949,276	10/26/1988 8/14/1990	Expires in 2007
Valveless, Positive Displacement Metering Pump	US 4,941,809	7/17/1990	
Method and Apparatus for Oxidative Decomposition and Analysis of a Sample	US 4,916,077	4/10/1990	
Method and Apparatus for Analysis of a Sample for Nitrogen	US 4,914,037	4/3/1990	
Method and Apparatus for Reductive decomposition and Analysis of a Sample	US 4,904,606	2/27/1990	
Submissible Positive-Displacement Pump	US 4,863,358	9/5/1989	
Energy-Selected Electron Imaging Filter	US 4,851,670	7/25/1989	
Anticontaminator for Transmission Electron Microscopes	US 4,833,330	11/3/1987 5/23/1989	Lapsed 05/23/2001 for failure to pay 12-yr. maintenance fee
Variable Attenuation Parallel Detector	US 4,831,255	2/24/1988 5/16/1989	Lapsed 05/16/2001 for failure to pay

Subject	Patent Number	Filing/Issue Date	Status
			12-yr. maintenance fee
Spectrograph for Contamination Evaluation in Space	US 4,815,842	3/28/1989	Lapsed 03/28/2001 for failure to pay 12-yr. maintenance fee
Liquid Level Control System	US 4,809,129	2/28/1989	Lapsed 02/28/2001 for failure to pay 12-yr. maintenance fee
Piezoelectric Visometer	US 4,799,378	7/29/1987 1/24/1989	Lapsed 01/24/2001 for failure to pay 12-yr. maintenance fee
Multiple Specimen Cryotransfer Holder for Electron Microscopes	US 4,797,261	1/10/1989	
Parallel-Detection Electron Energy-Loss Spectrometer	US 4,743,756	5/10/1988	
TV System for Transmission Electron Microscopes	US 4,739,399	4/19/1988	
Anti-Drift Device for Side Entry Electron Microscope Specimen Holders	US 4,703,181	10/27/1987	
Piezoelectric Weighing Device	US 4,697,657	11/17/1986 10/6/1987	Lapsed 10/06/1999 for failure to pay 12-yr. maintenance fee
Controlled Atmosphere Oven	US 4,680,167	1/29/1986 7/14/1987	
Method and Apparatus for Securing and Transferring Grid Specimens	US 4,672,797	6/21/1985 6/16/1987	Lapsed 06/16/1999 for failure to pay 12-yr. maintenance fee
Float Switch Assembly for Refrigeration System	US 4,647,740	3/3/1987	28-Jan-2005
Method for Controlling a Multicompressor Station	US 4,640,665 Divisional 4,494,006 (Serial No. 06/418,224)	11/13/1984 2/3/1987	Expires in 2004
External Bottle Cap	US 4,634,029	1/6/1987	29-Jan-2006

Subject	Patent Number	Filing/Issue Date	Status
Piezoelectric Ratio Weighing Device	US 4,623,030	10/21/1985 11/1/1986	Lapsed 11/18/1998 for failure to pay 12-yr. maintenance fee
Self-Sealing Closure Device	US 4,621,743	11/11/1986	16-May-2005
Liquid Chemical Dispensing System	US 4,601,409	7/22/1986	19-Nov-2004
Constant Clearance Positive Displacement Piston Pump	US 4,575,317	3/11/1986	Lapsed 03/11/1994 for failure to pay 8- yr. maintenance fee
Valve-Strainer Housings and Assemblies	US 4,550,896	11/5/1985	Expires 4-Apr- 2004
Impeller Pump with Self-Priming Column Attachment (VMI)	US 4,523,900	6/18/1985	Lapsed 06/18/1997 for failure to pay 12-yr. maintenance fee

U.S. Patent Applications

Subject	Application/ Patent Number	Filing/Issue Date	Expired / Abandoned Date
Vibrating Tube Mass Flowmeter	US Provisional App (ref. No. 36167.007)	7/24/2003	Expires 07/24/2004
Controlling Multiple Pumps Operating in Parallel . . .	US 10/464,931	6/19/2003	
Improving the Response Time of a Steam Turbine . . .	US 10/335,028	12/31/2002	
Method & Apparatus for Improving Steam Turbine Speed . . .	US 10/281,846	10/28/2002	
Immersible Bearing Frame	US 10/131,311	4/23/2002	
System and Method for Leak Rate Testing During Adiabatic Cooling	US 10/087,729	3/1/2002	Allowed
Method and Apparatus for Steam Turbine Speed Control	US 10/002,924	11/15/2001	Issue Fee was due 02/03/2004. If not paid, abandoned.
Ion Beam System and Method for Electron Microscopy Specimen Preparation	US 09/874766	6/5/2001	
System and Method for Establishing an Aggregate Degree of Brightness for Each Primary Color to Create a Composite Color Digital Image	US 09/671113	9/28/2000	
Method for Automatic Identification of Spots in a High-Density Array Image	US 09/665665 Patent 6,498,863	9/20/2000 12/24/2002	

U.S. Expired Patents and Expired Patent Applications

Subject	Patent Number	Filing/Issue Date	Expired Date
Controlled Atmosphere Oven	US 4,568,426	2/9/1983 2/4/1986	Expired 02/09/2003
Automatic Vent Valve	US 4,541,455	9/17/1985	Expired 12-Dec-2003
Method and Apparatus for Controlling a Multicompressor Station	US 4,494,006	9/15/1982 1/15/1985	Expired 09/15/2002
Method of Automatic Limitation for a Controlled Variable in a Multivariable System	US 4,486,142	12/4/1984	Expired 12/04/2001
Methods for Laser Debris Shield	US 4,439,299	3/27/1984	Lapsed 03/27/1996 for failure to pay 12-yr. maintenance fee
Vacuum Ultraviolet Filter	US 4,408,825	10/11/1983	Expired 10/11/2003
Combustion Apparatus for Use in Elementary Analysis	US 4,351,801	9/28/1982	Lapsed 09/28/1994 for failure to pay 12-yr. maintenance fee
Fast Frame Rate Augmentation	US 4,339,775	6/16/1980 7/13/1982	Expired 06/16/2000
Labrynth Seal with Current-Forming Seal Passages	US 4,335,886	6/22/1982	Expired 07/22/2000
Fast Frame Rate Sensor Readout	US 4,322,752	1/16/1980 3/30/1982	Expired 01/16/2000
Specimen Elevator for an Ion Milling Machine	US 4,272,682	6/9/1981	Expired 06/09/2001
Multipathed Monochromator	US 4,268,170	5/19/1981	Expired 05/19/2001
Proportioning Fluids in Hemodialysis	US 4,197,196	4/8/1980	Expired 04/08/1997
Fluid Handling System	US 4,178,240	12/11/1979	Expired 12/11/1996
Method and Apparatus for Preventing Surge in a Dynamic Compressor	US 4,142,838	3/6/1979	Expires 12/01/1997

Subject	Patent Number	Filing/Issue Date	Expired Date
Methods and Systems for Controlling the Operation of Means for Compressing a Fluid Medium and the Corresponding Networks	US 4,119,391	10/10/1978	Expired 10/10/1995
Method and Apparatus for Noninteracting Control of a Dynamic Compressor Having Rotating Vanes	US 4,102,604	7/25/1978	Expired 07/25/1995
Method and Apparatus for Antisurge Protection of a Dynamic Compressor	US 4,046,490	6-Sept-77 Reissued 8-Jul-1980	Expired 109/06/994
Method and Apparatus for Controlling a Dynamic Compressor	US 3,994,623	11/30/1976	Expired 11/30/1993
Spool Valve	US 3,985,337	10/12/1976	Expired 10/12/1993
Control System for Controlling a Dynamic Compressor	US 3,979,655	9/7/1976	Expired 09/07/1993
Method of Operating the Heating Stoves	US 3,951,586	4/20/1976	Expired 04/20/1993
Pump Impeller with Skirt	US 3,743,437	7/3/1973	Expired 07/03/1990
Diffraction Grating with 2 Diffraction Surfaces	US 3,698,795	10/17/1972	Expired 10/17/1989
Aeration Pump	US 3,663,117	5/16/1972	Expired 05/16/1989
Sewage-Pumping Station	US 3,630,637	12/28/1971	Expired 12/28/1988
Multiple Signal Pilot for Fluid Logic Valve	US 3,542,073	11/24/1970	Expired 11/24/1987
Indicator for Transitory Fluid Pulses in a Fluid Control System	US 3,542,065	11/24/1970	Expired 11/24/1987
Modular Valve and Operator for Fluid Logic and Control System	US 3,516,442	6/23/1970	Expired 06/23/1987
Acceleration Sensing Device	US 3,448,228	6/3/1969	Expired 06/03/1986
Temperature Detecting Actuator for Bearings	US 3,401,666	9/17/1968	Expired 09/17/1985
Mechanical Seal	US 3,301,191	1/31/1967	Expired 01/31/1984
Delta Impeller	US 3,295,456	1/3/1967	Expired 01/03/1984

Subject	Patent Number(s)	Filing/Issue Date	Expired Date
Air Lift	US 3,282,226	11/1/1966	
Apparatus for Producing Liquid Mixture	US 3,207,485	9/21/1965	Expired 09/21/1982
Temperature Responsive Safety Control Valve	US 3,189,277	6/15/1965	Expired 06/15/1982
Vibration Responsive Trip Valve Assembly	US 3,109,441	11/5/1963	Expired 11/05/1980
Sewage Pump Station Remote Viewing System for Electron Microscope Specimens	US 918,534 US 60/092600	7/13/1998	Expired Expired 07/13/1999

FOREIGN PATENTS and PATENT APPLICATIONS

Subject	Application/ Patent Number	Filing/Issue Date	Expired/ Abandoned Date
Single Tilt and Rotation Cryotransfer Holder for Electron Microscopes	WO/US/01/23118	7/20/2001	
Ion Beam System and Method for Electron Microscopy Specimen Preparation	WO/US/01/19504	6/18/2001	
Precision-Controlled Slit Mechanism for Electron Microscope	WO/PCT/US96/12838	8/8/1996	
Specimen Holder and Apparatus for Two-Sided Ion Milling System	WO/PCT/US/95/13992	10/30/1995	
Liquid Dispensing System with Enhanced Filter	WO US02/09997	3/29/2002	
Resolution-Enhancement Device for an Optically-Coupled Image Sensor for an Electron	WO PCT/US/96/1	9/24/1996	
Automated Set Up of an Energy Filtering Transmission Electron Microscope	WO PCT US99/18186	8/11/1999	
Methods for Improving Resolution and Reducing Noise in an Image Detector for an Electron Microscope	WO PCT US98/12307	6/12/1998	
Ultra-High Tilt Specimen Cryotransfer Holder	WO PCT US98/04635	3/10/1998	
Precision Etching and Coating System	WO PCT US97/22640	12/10/1997	
Automated Set Up of an Energy Filtering Transmission Electron Microscope	WO PCT US97/11896	7/10/1997	
Optically Coupled Large-Format Solid State Imaging Device	WO PCT US96/14149	8/27/1996	

Method and Apparatus for Load Balancing Among Multiple Compressors	Uzbekistan 9600910.2		21-Jun-2000
Method and Apparatus for Limiting a Critical Variable of a group of Compressors or an Individual Compressor	Ukraine UA 99010317/I	1/21/1999	
Method and Apparatus for Load Balancing Among Multiple Compressors	Ukraine 96103950/I	10/8/1996	
Method and Apparatus for Electrohydraulic Control of a Steam Turbine System	Ukraine 2000020879	2/16/2000	
Dry Pit Submersible Pump	UK 9821368.9	5/5/2002	
Aeration System	UK 9806117.9	3/23/1998	
Pre-Event/Post-Event Recording in a Solid State Fast Frame Recorder	UK 500777	8/14/1996	
Methods and Systems for Controlling the Operation of Means for Compressing a Fluid Medium and the Corresponding Networks	UK 49926/75		10/31/1977
Aeration System	UK 2320742	9/24/1996	
Probe for a Capacitance Bridge Liquid Level Control System	UK 2,212,272	11/31/91	
Chemiluminescent Nitrogen Detection Method and Apparatus	UK 1,578,281	11/5/1980	
Visualization Techniques for Temporarily Acquired Sequences of Images	UK 0551595	1/27/1999	
Method and Apparatus for Dispensing High Viscosity Fluids	TW 89121812	1/9/2001	
Methods and Systems for Controlling the Operation of Means for Compressing a Fluid Medium and the Corresponding Networks	Switzerland 16010/75	10/31/1977	

Method and Apparatus for Controlling a Dynamic Compressor	Switzerland 1580/76		31-Aug-1978
Method and Apparatus for Controlling a Dynamic Compressor	Switzerland 016010/75		1977
Aeration System	South Africa 96/8140	6/25/1997	
Aeration System	South Africa 96/8140	6/25/1997	
Load Sharing Method and Apparatus for Controlling a Main Gas Parameter of a Compressor Station with Multiple Dynamic Compressors	South Africa 93/4185		15-May-2001
Method and Apparatus for Preventing Surge in a Dynamic compressor	South Africa 89/7281		24-Jul-2000
Method and Apparatus for Load Balancing Among Multiple Compressors	Slovakia SK PV 1329-96		4-Oct-1999
Method and Apparatus for Limiting a Critical Variable of a group of Compressors or an Individual Compressor	Russia RU 99101354	1/20/1999	
Method and Apparatus for Preventing Surge While Taking a Turbocompressor Off-Line from a Parallel Configuration	Russia RU 98123612	12/22/1998	
Method for Predicting and Using the Exhaust Gas Temperatures for Control of Two and Three Shaft Gas Turbines	Russia RU 2170358	7/10/2001	Expires Feb. 2016
Load Sharing Method and Apparatus for Controlling a Main Gas Parameter of a Compressor Station with Multiple Dynamic Compressors	Russia RU 2084704	7/20/1997	Expires June 2013

Prevention of Parameter Excursions During Process Compressor Surge in Gas Turbines	Russia RU 2,168,044	5/27/2001	Expires in 2015
Prevention of Parameter Excursions in Gas Turbines	Russia RU 2,168,044	5/27/2001	Expires in 2015
Method and Apparatus for Measuring the Distance of a Turbocompressor's Operating Point to the Surge Limit Interface	Russia 2,168,071	5/27/2001	
Liquid Flow Divider	provisional application filed	5/11/2001	
Method and Apparatus for Load Balancing Among Multiple Compressors	Poland PL 316 607		21-Jun-2000
Method and Apparatus for Control of a Steam Turbine	pending		
Method and Apparatus for Control of Extraction / Admission Steam Turbines	pending		
Method and Apparatus for Optimization of Compressor Network Operation	pending		
Method and Apparatus for Steam Turbine Control	pending		
Multi-Mode Electronic Camera System for an Electron Microscope	pending	8/1/2003	
Shuttering Mechanism for CCD's	pending		
Gas Flow Rate Measurement Apparatus and Method	PCT/US98/20135		
Method and Apparatus for Load Balancing Among Multiple Compressors	Norway 963591		21-Jun-2000

Method and Apparatus for Measuring the Distance of a Turbocompressor's Operating Point to the Surge Limit Interface	Norway 951195	3/29/1995	
Method for Predicting and Using the Exhaust Gas Temperatures for Control of Two and Three Shaft Gas Turbines	Norway 19960279		19-Jan-1999
Prevention of Parameter Excursions During Process Compressor Surge in Gas Turbines	Norway 19952860		24-Jul-2000
Prevention of Parameter Excursions in Gas Turbines	Norway 19952860		24-Jul-2000
Load Sharing Method and Apparatus for Controlling a Main Gas Parameter of a Compressor Station with Multiple Dynamic Compressors	Norway 19932091		17-May-1999
Method and Apparatus for Preventing Surge in a Dynamic compressor	Norway 174,358		19-Jan-1999
Precision Liquid Dispenser	NL 376,497	1/19/1994	
Aeration System	New Zealand 319837	3/27/1998	
Aeration System	New Zealand 319837	3/9/2000	
Immersible Motor System	Mexico PA/a/2002/007012	7/18/2002	
Dry Pit Submersible Pump	Mexico PA/a/1998/08119	10/2/1998	
Liquid Dispensing System, Liquid Dispensing Method and Controller Process in a Liquid Dispensing System	KR 194,503	2/9/1999	
Precision Liquid Dispenser	KR 135,602	1/15/1998	
Method and Apparatus for Dispensing High Viscosity Fluids	KR 102000-0061355		

Valveless, Positive Displacement Metering Pump	Korea 9745/1986	11/18/1986	
Angular Adjustment Pump and Method for Adjusting the Flow Rate Thereof	Korea 3543/1991	5/5/1991	
Valveless, Positive Displacement Pump including Hinge for Angular Adjustment	Korea 29/1991	1/4/1991	
Pump with Multi-Port Discharge	Korea 160/1991	1/8/1991	
Ultra-High Tilt Specimen Cryotransfer Holder	JP/PCT/539698/98	3/10/1998	
Precision Etching and Coating System	JP/PCT/528811/98	12/10/1997	
Specimen Holder and Apparatus for Two-Sided Ion Milling System	JP/PCT/516090/96	10/30/1995	
Automated Set Up of an Energy Filtering Transmission Electron Microscope	JP/PCT/507913/98	7/10/1997	
Methods for Improving Resolution and Reducing Noise in an Image Detector for an Electron Microscope	JP/PCT/503282/99	6/12/1998	
Automated Set Up of an Energy Filtering Transmission Electron Microscope	JP/PCT/2000-56687	8/11/99	
Resolution-Enhancement Device for an Optically-Coupled Image Sensor for an Electron	JP PCT 514311/97	9/24/1996	
Precision-Controlled Slit Mechanism for Electron Microscope	JP 510292/97	8/8/1996	Abandoned
Precision Liquid Dispenser	JP 3,057,570	4/28/2000	
Liquid Dispensing System	JP 3,039,689	3/3/2000	
Single Tilt and Rotation Cryotransfer Holder for Electron Microscopes	JP 2002-516807	7/20/2001	

Ion Beam System and Method for Electron Microscopy Specimen Preparation	JP 2002-504461	6/18/2001	
Gas Flow Rate Measurement Apparatus and Method	JP 2000-513112		
Method and Apparatus for Dispensing High Viscosity Fluids	JP 2000-318343	10/18/2000	
Filtering and Dispensing System	JP 2,835,900	10/9/1998	
Method of Operating the Heating Stoves	JP 1677/1976		12-Sep-1979
Angular Adjustment Pump and Method for Adjusting the Flow Rate Thereof	Japan Hei 3-47300	2/21/1991	
Pump with Multi-Port Discharge	Japan Hei 3 (1991) – 11638	1/9/1991	
Spatial Non-Uniformity Correction of a Color Sensor	Japan 98/0122453	5/1/1998	
An L-C Low Pass Filter Correlator	Japan 95/0319887	12/8/1995	
CCD Dark Mean Level Correction Circuit Employing Digital Processing and Analog Subtraction Requiring No Advanced Knowledge of Dark Mean Level (Digital Black Clamp)	Japan 95/0278116	10/25/1995	
Ground Delay Line Correlator	Japan 95/0274399	10/23/1995	
An Imaging System Having a serial I/O Link Between Image Channels	Japan 95/0245665	9/22/1995	
Frame Buffer Address Generator for the Multiple Format Display of Multiple Format Source Video	Japan 95/0066207	3/24/1995	
Automatic Channel Gain and Offset Balance for Video Cameras Employing Multi-Channel Sensors	Japan 93/0314807	12/15/1993	

Telephoto Sensor Trigger in a Solid State Motion Analysis System	Japan 92/0501343	11/25/1991	
Visualization Techniques for Temporarily Acquired Sequences of Images	Japan 92/0333387	12/15/1992	
Video Trigger in a Solid State Motion Analysis System	Japan 91/0506636	3/25/1991	
Pre-Event/Post-Event Recording in a Solid State Fast Frame Recorder	Japan 91/0500778	10/26/1990	
Load Sharing Method and Apparatus for Controlling a Main Gas Parameter of a Compressor Station with Multiple Dynamic Compressors	Japan 5-150335		15-Mar-2000
Valveless, Positive Displacement Pump including Hinge for Angular Adjustment	Japan 2-416953	12/28/1990	
Method and Apparatus for Controlling a Dynamic Compressor	Japan 12886/1976		12-Sep-1979
Method of Automatic Limitation for a Controlled Variable in a Multivariable System	Japan 126095/1987		1992
Fast Frame Rate Augmentation	Japan 1,732,151	5/20/1981 2/17/1993	
Method and Apparatus for Preventing Surge in a Dynamic Compressor	Japan 1,494,683		7/30/1999
Precision Liquid Dispenser	IT 376,497	1/19/1994	
Valveless, Positive Displacement Metering Pump	India 172,012	3/18/1994	
Method and Apparatus for Load Balancing Among Multiple Compressors	Hungary HU P9602898		21-Jun-2000
Combustion Apparatus	Germany P3116049.2		

Method and Apparatus for Controlling a Dynamic Compressor	Germany P2605025.9		16-Apr-1979
Methods and Systems for Controlling the Operation of Means for Compressing a Fluid Medium and the Corresponding Networks	Germany P2554908.0		10/31/1977
Automatic Channel Gain and Offset Balance for Video Cameras Employing Multi-Channel Sensors	Germany 69316569.3	1/21/1998	
Visualization Techniques for Temporarily Acquired Sequences of Images	Germany 69228299.8	1/27/1999	
Video Trigger in a Solid State Motion Analysis System	Germany 69120495.0	1/26/1996	
Telephoto Sensor Trigger in a Solid State Motion Analysis System	Germany 69117736.8	3/6/1996	
Pre-Event/Post-Event Recording in a Solid State Fast Frame Recorder	Germany 69028115.3	8/14/1996	
Fast Frame Rate Augmentation	Germany 3,175,785	5/20/1981 12/30/1986	
Fast Frame Rate Sensor Readout	Germany 3,070,821	12/10/1980 6/26/1985	
Precision Liquid Dispenser	GB 376,497	1/19/1994	
Method of Operating the Heating Stoves	GB 1,515,081	1/6/1976	
Pre-Event/Post-Event Recording in a Solid State Fast Frame Recorder	France 500777	8/14/1996	
Visualization Techniques for Temporarily Acquired Sequences of Images	France 0551595	1/27/1999	
Method of Operating the Heating Stoves	FR 76 00316		21-Jan-1977
Precision Liquid Dispenser	FR 376,497	1/19/1994	

Angular Adjustment Pump and Method for Adjusting the Flow Rate Thereof	Finland 912098	4/30/1991	
Pump with Multi-Port Discharge	Finland 910104	1/9/1991	
Valveless, Positive Displacement Pump including Hinge for Angular Adjustment	Finland 910030	1/3/1991	
Method and Apparatus for Load Balancing Among Multiple Compressors	Eurasia EA-000267	12/4/1998	
Method and Apparatus for Electrohydraulic Control of a Steam Turbine System	Eurasia 200000128	2/15/2000	
Angular Adjustment Pump and Method for Adjusting the Flow Rate Thereof	EPO/Germany DE69108617.6	4/5/1995	
Valveless, Positive Displacement Pump including Hinge for Angular Adjustment	EPO/Germany DE69101558.9	4/6/1991	
Pump with Multi-Port Discharge	EPO/Germany 69101716T2	11/10/1994	
Valveless, Positive Displacement Pump including Hinge for Angular Adjustment	EPO/Austria E104019	10/10/1994	
Pump with Multi-Port Discharge	EPO/Austria E 104745	10/25/1994	
Self Cleaning Reciprocating and/or Rotating Device	EPO 93921320.3		
Angular Adjustment Pump and Method for Adjusting the Flow Rate Thereof	EPO 0464301 (Belgium, Germany, Italy, Luxembourg, Netherlands, Spain, Sweden, Switzerland, UK)	4/5/1995	
Pump with Multi-Port Discharge	EPO 0437361 (Belgium, Germany, France, Italy, Netherlands, Spain, Sweden, Switzerland, UK)	4/20/1994	

Valveless, Positive Displacement Pump including Hinge for Angular Adjustment	EPO 0436512 (Belgium, Germany, France, Netherlands, Spain, Sweden, Switzerland)	4/6/1991	
Method and Apparatus for Limiting a Critical Variable of a group of Compressors or an Individual Compressor	EPC 99400128.7	1/20/1999	
Method for Predicting and Using the Exhaust Gas Temperatures for Control of Two and Three Shaft Gas Turbines	EPC 078919	9/13/2000	Expires Feb. 2016
Load Sharing Method and Apparatus for Controlling a Main Gas Parameter of a Compressor Station with Multiple Dynamic Compressors	EPC 0576238	9/3/1997	Expires June 2013
Method and Apparatus for Preventing Surge in a Dynamic compressor	EPC 0500196	6/29/1994	
Method and Apparatus for Preventing Surge in a Dynamic compressor	EPC 0500195		1996
Method and Apparatus for Preventing Surge in a Dynamic compressor	EPC 0366219	11/11/1993	
Method and Apparatus for Load Balancing Among Multiple Compressors	EPC (5) 96.420313.7	10/18/1995	
Method and Apparatus for Maximizing Productivity of a Natural Gas Liquids Production Plant	EPC (5) 0040075.0	2/22/2000	
Method and Apparatus for Preventing Surge in a Dynamic Compressor	EPC (4) 0002360	5/25/1983	
Prevention of Parameter Excursions in Gas Turbines	EPC (16) 95305434.4		24-Apr-1997

Prevention of Parameter Excursions During Process Compressor Surge in Gas Turbines	EPC (16) 95305434.3		24-Apr-1997
Method and Apparatus for Measuring the Distance of a Turbocompressor's Operating Point to the Surge Limit Interface	EPC (16) 95302259.7	4/4/1995	
Automated Set Up of an Energy Filtering Transmission Electron Microscope	EP/PCT/99967841.0	8/11/99	
Methods for Improving Resolution and Reducing Noise in an Image Detector for an Electron Microscope	EP/PCT/98932750.7	6/12/1998	
Ultra-High Tilt Specimen Cryotransfer Holder	EP/PCT/98909077.4	3/10/1998	
Automated Set Up of an Energy Filtering Transmission Electron Microscope	EP/PCT/97936047.6	7/10/1997	
Electron Image Detector Coupled by Optical Fibers with Absorbing Outer Cladding to Reduce	EP/PCT/00970524.5	9/29/2000	
Resolution-Enhancement Device for an Optically-Coupled Image Sensor for an Electron	EP PCT 96933893.8	9/24/1996	
Spatial Non-Uniformity Correction of a Color Sensor	EP 98201328.6	4/24/1998	
An L-C Low Pass Filter Correlator	EP 95120196.1	12/20/1995	
CCD Dark Mean Level Correction Circuit Employing Digital Processing and Analog Subtraction Requiring No Advanced Knowledge of Dark Mean Level (Digital Black Clamp)	EP 95116930.9	10/27/1995	

Ground Delay Line Correlator	EP 95116835.0 (DE, UK, FR)	10/26/1995	
An Imaging System Having a serial I/O Link Between Image Channels	EP 95114920.2	9/22/1995	
Frame Buffer Address Generator for the Multiple Format Display of Multiple Format Source Video	EP 95104053.4	3/20/1995	
Automatic Channel Gain and Offset Balance for Video Cameras Employing Multi-Channel Sensors	EP 603593 (France, UK)	1/21/1998	
Fast Frame Rate Augmentation	EP 53184 (France, UK)	5/20/1981 12/30/1986	
Telephoto Sensor Trigger in a Solid State Motion Analysis System	EP 512105 (France, UK)	3/6/1996	
Video Trigger in a Solid State Motion Analysis System	EP 482139 (France, UK)	1/26/1996	
Fast Frame Rate Sensor Readout	EP 43828 (France, Netherlands, Sweden, UK)	12/10/1980 1/26/1985	
Single Tilt and Rotation Cryotransfer Holder for Electron Microscopes	EP 01959112.2	7/20/2001	
Ion Beam System and Method for Electron Microscopy Specimen Preparation	EP 01948455.9	6/18/2001	
Method of Operating the Heating Stoves	DE P2600540.3		16-Apr-1979
Precision-Controlled Slit Mechanism for Electron Microscope	DE 69601576.5	2/24/1999	
Specimen Holder and Apparatus for Two-Sided Ion Milling System	DE 69506583	12/9/98	
Precision Liquid Dispenser	DE 376,497 68912552.6	1/19/1994	
Method and Apparatus for Load Balancing Among Multiple Compressors	Czech Republic CZ PV 3046-96		4-Oct-1999

Method and Apparatus for Load Balancing Among Multiple Compressors	Croatia P960476A		21-Jun-2000
Dry Pit Submersible Pump	Canada 2,248,849	7/18/2002	
Aeration System	Canada 2,232,735	3/19/1998	
Aeration System	Canada 2,232,735	9/24/1996	
Method and Apparatus for Load Balancing Among Multiple Compressors	Canada 2,184,130		21-Jun-2000
Method for Predicting and Using the Exhaust Gas Temperatures for Control of Two and Three Shaft Gas Turbines	Canada 2,168,422		19-Jan-1999
Prevention of Parameter Excursions During Process Compressor Surge in Gas Turbines	Canada 2,154,404		24-Apr-1997
Prevention of Parameter Excursions in Gas Turbines	Canada 2,154,404		24-Apr-1997
Method and Apparatus for Measuring the Distance of a Turbocompressor's Operating Point to the Surge Limit Interface	Canada 2,146,583		19-Jan-1999
Load Sharing Method and Apparatus for Controlling a Main Gas Parameter of a Compressor Station with Multiple Dynamic Compressors	Canada 2,098,941		19-Jan-1999
Angular Adjustment Pump and Method for Adjusting the Flow Rate Thereof	Canada 2,033,253	5/23/1995	
Pump with Multi-Port Discharge	Canada 2,032,240	2/7/1995	
Valveless, Positive Displacement Pump including Hinge for Angular Adjustment	Canada 2,032,019	5/23/1995	
Fast Frame Rate Augmentation	Canada 1158770	6/15/1981 12/13/1983	

Liquid Level Control System for Refrigeration Apparatus	Canada 1,316,711	4/27/1993	
Valveless, Positive Displacement Metering Pump	Canada 1,292,640	12/3/1991	
Method and Apparatus for Preventing Surge in a Dynamic compressor	Canada 1,291,737		24-Jul-2000
Method and Apparatus for Controlling a Multicompressor Station	Canada 1,256,835	7/4/1989	
Impeller Pump with Self-Priming Column Attachment	Canada 1,224,969	8/4/1987	
Impeller Pump with Self-Priming Column Attachment (VMI)	Canada 1,224,969	8/4/1987	
Fast Frame Rate Sensor Readout	Canada 1,157,145	12/29/1980 11/15/1983	
Method and Apparatus for Antisurge Protection of a Dynamic Compressor	Canada 1,109,036	9/15/1981	
Method and Apparatus for Preventing Surge in a Dynamic Compressor	Canada 1,108,946	9/15/1981	
Method of Operating the Heating Stoves	Canada 1,059,760	8/7/1979	
Methods and Systems for Controlling the Operation of Means for Compressing a Fluid Medium and the Corresponding Networks	Canada 1,040,051	10/10/1978	
Immersible Motor System	CA 2,396,548	7/15/2002	
Method and Apparatus for Load Balancing Among Multiple Compressors	Bulgaria BG 100 922		29-Mar-1999
Angular Adjustment Pump and Method for Adjusting the Flow Rate Thereof	Austria E120832	1/2/1991	

Methods and Systems for Controlling the Operation of Means for Compressing a Fluid Medium and the Corresponding Networks	Australia 87260/75		10/31/1977
Aeration System	Australia 72451/96	4/3/1998	
Aeration System	Australia 701979	9/24/1996	
Spiral-Armored Cable Connection	application to be prepared		
Infra-Red Stimulation and Response Measurement	application pending for filing		
A Fast Method For Detecting Detectible Combustion Products and Methods for Making and Using Same	96600/21 Provisional	10/21/2003	
An Improved Combustion Apparatus and Methods for Making and Using Same	96600/20 Provisional	10/21/2003	
Precision Etching and Coating System	0951578 (DE, EP, FR, GB)	8/22/2001	
Precision-Controlled Slit Mechanism for Electron Microscope	0834186 (EP, FR, GB)	2/24/1999	
Optically Coupled Large-Format Solid State Imaging Device	08/527,172	9/11/1995	
Specimen Holder and Apparatus for Two-Sided Ion Milling System	0792447 (EP, FR, GB)	12/9/98	

OTHER COPYRIGHTABLE MATERIAL

Title
Mud Motor Design Program
MQHydro Pump Design Software
6NHTA Frame Mounted Pump
Centrific 5.6
Centrific 5.7
F18 Frame
Stage-Pro
Prints-Pro
Database Module
Series 4000 Software
Testra Software
Vector Software
Advanced Leak Detection Software
Proposal Tracking System Software
Series 4000 Operations Manual, User Manual, Training Manuals
Testra Operations Manual
Sprint Operations Manual
Vector Operations Manual
SpectraSence
MIMS Micro Indentation Measurement System