PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Derek S. Pai	10/27/2002
Steven T. Kunitake	10/29/2002
Jorge Monteon	10/25/2002
Derrick Richardson	11/04/2002

RECEIVING PARTY DATA

Name:	Arcturus Engineering, Inc.
Street Address:	400 Logue Avenue
City:	Mountain View
State/Country:	CALIFORNIA
Postal Code:	94043

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11076272

CORRESPONDENCE DATA

Fax Number: (415)358-8590

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

Phone: 415-641-7500

Email: ray@lukasipgroup.com

Rimas T. Lukas Correspondent Name: Address Line 1: PO Box 3295

Address Line 4: Half Moon Bay, CALIFORNIA 94019

ATTORNEY DOCKET NUMBER:	ARC01-20036.30
NAME OF SUBMITTER:	Rimas T. Lukas

Total Attachments: 4

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PATENT

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PATENT REEL: 017637 FRAME: 0621

ttorney Docket No.: ARC012003620

ASSIGNMENT JOINT

1990 Chestaut St. Apt # SAN FRANCE U, CA 9412

THIS ASSIGNMENT, by Derek S. PAI, Steven T. KUNITAKE, Derrick RICHARDSON, and Jorge MONTEON (hereinafter referred to as the assignors), residing at 1089 Eden Bower Lane, Redwood City, California 94061; 153 Exeter Avenue, San Carlos, California 94070; 700 SW 110th Avenue #24-301, Pembroke, Florida 33025; and 1492 Sanborn Avenue, San Jose, California 95110 and, respectively, witnesseth:

WHEREAS, said assignors have invented certain new and useful improvements in LOW VOLUME FILTRATION COLUMN DEVICES AND METHODS OF FILTERING THEREWITH, set forth in an application for Letters Patent of the United States, bearing Serial No. 10/209,508 and filed on July 30. 2002; and

WHEREAS, Arcturus Engineering, Inc., a corporation duly organized under and pursuant to the laws of California and having its principal place of business at 400 Logue Avenue, Mountain View, California 94043 (hereinafter referred to as the assignee) is desirous of acquiring the entire right, title and interest in and to said inventions and said application for Letters Patent of the United States, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon:

NOW, THEREFORE, for good and valuable consideration, the receipt, sufficiency and adequacy of which is hereby acknowledged, said assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto said assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions, application for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all divisions, continuations and continuations-in-part of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by said assignee, for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the assignors, had this sale and assignment not been made.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, said assignors are the sole and lawful owners of the entire right, title and interest in and to said inventions and the application for Letters Patent above-mentioned, and that the same are unencumbered and that said assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee, its successors, legal representatives and assigns, that said assignors will, whenever counsel of said assignee, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said inventions, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said inventions in any country, including interference proceedings, is lawful and desirable, or that any division, continuation or continuation-in-part of any application for Letters Patent or any reissue or extension of any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said inventions, without charge to said assignee, its successors, legal representatives and assigns, but at the cost and expense of said assignee, its successors, legal representatives and assigns.

AND said assignors hereby request the Commissioner of Patents to issue said Letters Patent of the United States to said assignee as the assignee of said inventions and the Letters Patent to be issued thereon for the sole use of said assignee, its successors, legal representatives and assigns.

(Assignor) Date: 10/2-7/02

(Assignor) Larry T Hundred Date: 10/2/02

PATENT REEL: 017637 FRAME: 0622

torney Docket No.: ARC012003620

(Assignor)	Date:	
Name: Derrick RICHARDSON		
(Assignor)Name: Jorge MONTEON	Date: / 0 / 25 / 0 2	

Attorney Docket No.: ARC012003620

ASSIGNMENT JOINT

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SAN FRANCISCO, CA GU

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WHEREAS, said assignors have invented certain new and useful improvements in LOW VOLUME

FILTRATION COLUMN DEVICES AND METHODS OF FILTERING THEREWITH, set forth in an application for Letters Patent of the United States, bearing Serial No. 10/209,508 and filed on July 30, 2002; and

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NOW, THEREFORE, for good and valuable consideration, the receipt, sufficiency and adequacy of which is hereby acknowledged, said assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto said assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions, application for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all divisions, continuations and continuations-in-part of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by said assignee, for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the assignors, had this sale and assignment not been made.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, said assignors are the sole and lawful owners of the entire right, title and interest in and to said inventions and the application for Letters Patent above-mentioned, and that the same are unencumbered and that said assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee, its successors, legal representatives and assigns, that said assignors will, whenever counsel of said assignee, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said inventions, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said inventions in any country, including interference proceedings, is lawful and desirable, or that any division, continuation or continuation-inpart of any application for Letters Patent or any reissue or extension of any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said inventions, without charge to said assignee, its successors, legal representatives and assigns, but at the cost and expense of said assignee, its successors, legal representatives and assigns.

AND said assignors hereby request the Commissioner of Patents to issue said Letters Patent of the United States to said assignee as the assignee of said inventions and the Letters Patent to be issued thereon for the sole use of said assignee, its successors, legal representatives and assigns.

(Assignor) LMS	Date: 10/27/02
Name: Derek S. PAI	
(Assignor) Staron T Kuritali.	Date: 10/19/02
Name: Steven T. KUNITAKE	

kttorney Docket No.: ARC012003620

(Assignor) MITTLE QUENOTED SAN Name: Derrick RICHARDSON	Date: 11/4/07
Name: Derrick RICHARDSON	/
(Assignor)	Date: 10/25/02
Name: Jorge MONTEON	
/	

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PATENT REEL: 017637 FRAME: 0625