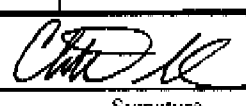


RECORDATION FORM COVER SHEET **PATENTS ONLY**

Docket No.: 3194.1025-009

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1 Name of conveying party(ies)/Execution Date(s) 1) DANIEL ALVAREZ, JR. 2) JEFFREY J. SPIEGELMAN 3) RUSSELL J. HOLMES Execution Date: 1) 06-07-05 2) 05-31-05 3) 05-31-05		2 Name and address of receiving party(ies) Name <u>MYKROLIS CORPORATION</u> Internal Address: _____ Street Address: <u>129 CONCORD ROAD</u> City: <u>BILLERICA</u> State: <u>MASSACHUSETTS</u> Country: _____ Zip: <u>01821</u> Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
3. Nature of conveyance. <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____		4. Application number(s) or patent number(s): A. Patent Application No.(s) <u>10/531,512</u> B. Patent No.(s) _____ Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Name and address of party to whom correspondence concerning document should be mailed: Name: <u>ALICE O. CARROLL, ESQ.</u> Internal Address: _____ <u>HAMILTON, BROOK, SMITH & REYNOLDS, P.C.</u> Street Address: <u>530 VIRGINIA ROAD, P.O. BOX 9133</u> City: <u>CONCORD</u> State: <u>MA</u> ZIP <u>01742-9133</u> Phone No. <u>978-341-0036</u> Fax No. <u>978-341-0136</u> Email Address <u>ALICE.CARROLL@HBSR.COM</u>		6. Total number of applications and patents involved <input checked="" type="checkbox"/> 1 7. Total Fee (37 CFR 1.21(h) & 3.41) \$ <u>40</u> <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorization to charge deposit account number 08-0380 <input type="checkbox"/> Previously submitted - Doc ID No. [] <input checked="" type="checkbox"/> Authorized to charge any deficiencies or credit any overpayment to deposit account number 08-0380 Do not attach a copy of this page if paying by deposit account and filing via facsimile. Attach a copy of this page if paying by deposit account and filing via mail.	
8. <u>CHARLTON SHEN</u> Name of Person Signing		<u></u> Signature	
		<u>21 June 2005</u> Date	
Total number of pages including cover sheet, attachments, and documents: <input checked="" type="checkbox"/> 7			

CH \$40.00 080380 10631612

Docket No. 3194.1025-009 (Mykrolis Ref. No.: 200300127)

JointASSIGNMENT

WHEREAS, we, **Daniel Alvarez, Jr., Jeffrey J. Spiegelman and Russell J. Holmes**, have invented a certain improvement in **METHOD FOR PURIFYING CARBON DIOXIDE** described in an application for Patent,

- ☐ the specification of which is about to be filed in the United States Patent Office (*use for utility (37 CFR § 1.53(b)) and design filings only*);
- ☐ is about to be filed in the United States Patent Office as a Provisional Application;
- ☐ the specification of which is United States Application No. [], filed [];
- ☒ the specification of which is a Patent Cooperation Treaty Application, International Application No. **PCT/US03/33006**, filed **October 16, 2003**, which designates the United States of America and assigned United States Application No. 10/531,512;
- ☐ which was patented under United States Patent No. [].

WHEREAS, **Mykrolis Corporation** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the **State of Delaware**, and having a usual place of business at **129 Concord Road, Billerica, Massachusetts 01821** desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein; I hereby expressly authorize the filing of an International Patent Application under the Patent Cooperation Treaty which corresponds to and claims the priority of the above-identified application;

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Docket No. 3194.1025-009 (Mykrolis Ref. No.: 200300127)

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of any future applications including substitution, reissue, divisional or continuation applications, and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor's Signature:

Daniel Alvarez, Jr.
Daniel Alvarez, Jr.

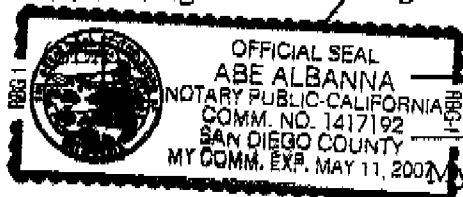
State/Commonwealth

of CaliforniaCounty of San Diego

On this 7th day of June, 2005, before me, the undersigned notary public, personally appeared **Daniel Alvarez, Jr.**,

☐ personally known to me, or☒ proved to me through satisfactory evidence of identification, which wasCAN # N8465933

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

Abe Albanna Notary PublicAbe Albanna (print name)Commission expires 05/11/2007

-3-

Docket No. 3194.1025-009 (Mykrohs Ref. No.: 200300127)

Inventor's Signature: _____

Jeffrey J. Spiegelman

State/Commonwealth

of _____

County of _____

On this _____ day of _____, 20____, before me, the undersigned notary public, personally appeared **Jeffrey J. Spiegelman**,

☐ personally known to me, or☐ proved to me through satisfactory evidence of identification, which was _____

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL)

Notary Public

(print name)

My Commission expires ____/____/____

Inventor's Signature: _____

Russell J. Holmes

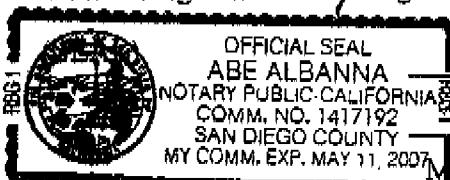
State/Commonwealth

of CaliforniaCounty of San Diego

On this 31 day of May, 2005, before me, the undersigned notary public, personally appeared **Russell J. Holmes**,

☐ personally known to me, or☒ proved to me through satisfactory evidence of identification, which wasCADC # A6440203

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

Abe Albanna

Notary Public

Abe Albanna

(print name)

My Commission expires

05/11/2007**PATENT**

Docker No. 3194.1025-009 (Mykrolis Ref. No.: 200300127)

JointASSIGNMENT

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- ☐ the specification of which is about to be filed in the United States Patent Office (*use for utility (37 CFR § 1.53(b)) and design filings only*);
- ☐ is about to be filed in the United States Patent Office as a Provisional Application;
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NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein; I hereby expressly authorize the filing of an International Patent Application under the Patent Cooperation Treaty which corresponds to and claims the priority of the above-identified application;

-2-

Docket No. 3194.1025-009 (Mykrolis Ref. No.: 200300127)

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of any future applications including substitution, reissue, divisional or continuation applications, and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor's Signature: _____

Daniel Alvarez, Jr.

State/Commonwealth _____

of _____

County of _____

On this _____ day of _____, 20____, before me, the undersigned notary public, personally appeared **Daniel Alvarez, Jr.**,

☐ personally known to me, or☐ proved to me through satisfactory evidence of identification, which was _____

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL)

Notary Public

(print name)

My Commission expires ____/____/____

-3-

Docket No. 3194.1025-009 (Mykrolis Ref. No.: 200300127)

Inventor's Signature: _____

Jeffrey J. Spiegelman

State/Commonwealth _____

of CaliforniaCounty of San Diego

On this 31 day of May, 2005, before me, the undersigned notary public, personally appeared **Jeffrey J. Spiegelman**,



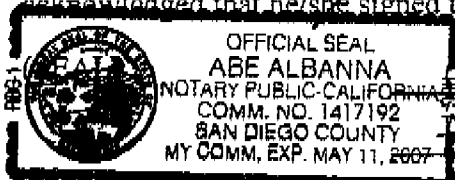
personally known to me, or



proved to me through satisfactory evidence of identification, which was

CAD # N8420395

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

Abe Albanna

Notary Public

Abe Albanna

(print name)

My Commission expires 05/11/2007

Inventor's Signature: _____

Russell J. Holmes

State/Commonwealth _____

of _____

County of _____

On this _____ day of _____, 20____, before me, the undersigned notary public, personally appeared **Russell J. Holmes**,



personally known to me, or



proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL) _____

Notary Public

(print name)

My Commission expires ____/____/____

PATENT