10/489587

3/12/04

A/0581-40

DT12 Rec'd PCT/PTO 12 MAR 2004

Form PTO-1595 (Rev. 10/02) OMB No. 0651-0027 (exp. 6/30/2005) Tab settings ⇔ ⇔ ♥	PATENT		U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office
	of Patents and Trademarks:	Please record the attached or	riginal documents or copy thereof.
1. Name of conveying party(ies):  J. Karl NIERMEYER  Marc LAVERDIERE  Ralph J. STANKOWSKI  Joseph E. SMITH  Additional name(s) of conveying party(ies)			of receiving party(ies) proporation  06-07-2004
3. Nature of conveyance:	attached? Tes V No		
Assignment Security Agreement	☐ Merger ☐ Change of Name	Street Address: 12	102759363 9 Concord Road
Execution Date:	/04, 3/9/04 4 respectively	Additional name(s) & add	State: MA Zip: 01821-4600
A. Patent Application No.(s)	gether with a new applic		te of the application is:
Express Mail No. EV1	13112272US 		***
	Additional numbers atta		
5. Name and address of party to w concerning document should be Name: Timothy J. King	mailed:	6. Total number of appl 7. Total fee (37 CFR 3.	
Internal Address: Mykrolis Corp		Enclosed	
3/2004 LLANDGRA 00000063 10489587 C:80P1 40.00 DA		Authorized to be	e charged to deposit account
Street Address: 129 Concord R	oad	8. Deposit account nun	nber:
City: Billerica State: MA Z	ip:		
	DO NOT USE	THIS SPACE	
9. Signature.  Name of Person Signing		Signature sheet attachments and door	7 <u> </u>
Total num	per of pages including over	sheet, attachments, and docu	uments: [15]

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments Washington, D.C. 20231

## PATENT ASSIGNMENT

WHEREAS, We, J Karl Niermeyer, residing at 52 Groton Road, Tyngsboro, Massachusetts 01879, Marc Laverdiere, residing at 149 Broadway, Wakefield, MA 01880, Ralph J. Stankowski, residing at 18 Boutwell Road, Westford, Massachusetts 01886 and Joseph E. Smith, residing at 30 Penni Lane, North Andover, Massachusetts 01845, and all being citizens of the United States of America and, have made an invention which invention is claimed and described in an application for Letters Patent of the United States of American entitled "SEPARATION MODULE", filed herewith under Express Mail No.: EV113112272US in the U.S. Patent and Trademark Office, and

WHEREAS, Mykrolis Corporation having a place of business at 129 Concord Road, Billerica, Massachusetts 0821, a corporation organized and existing under the laws of the state of Delaware (hereinafter "Mykrolis"), is desirous of acquiring the entire right, title and interest in and to the invention and in and to any Letters Patent that may be granted therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned party by these presents do hereby sell, assign and transfer unto Mykrolis, its successors and assigns the full, exclusive and worldwide right to the said invention including the United States of America, and the entire right, title and interest in, to and under any Letters Patent which may be granted on said invention, or any part thereof, or on any continuation, division or reissue thereof in the Unites States of America, in the territorial possessions of the United States of America and in any country foreign to the United States of America, the same to be held and enjoyed by Mykrolis, its successors and assigns as fully and entirely as the same would have been held by me, had this assignment not be made; and

We hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and respective Patent Office officials in any country foreign to the United States of America to issue said Letters Patent to Mykrolis as the assignee of my entire right, title and interest in, to and under the same, and we hereby further authorize Mykrolis to apply for Letters Patent in my name or its own name, as it in its sole discretion sees fit, utilizing any benefits which may exist under any International Agreement, in any country foreign tot he United States of America; and

We do hereby agree for myself and for my heirs, executors and administrators to execute any lawful documents and to testify as to any material fact or thing which Mykrolis, its successors and assigns may deem necessary in order to secure unto itself, its successors and assigns the full right, title and interest in and to and the full enjoyment of said invention or any part thereof and any Letters Patent, the same to be done without further consideration.

IN WITNESS WHEREOF, I hereby set my hand and affix my seal this <u>f</u> day of <u>March</u> , 2004.
Karl J. Niermeyer  J. KARL
State of Massachusetts ) 3/9/04
County of Middlesex )  J. Karl 319104
On this day and year aforesaid, before me personally appeared Karl J. Niermeyer, known to me to be the person described in and the person who executed the foregoing instrument of assignment and he did acknowledge the same to be his free act and deed.
Noreen Buckley
Noreen Buckley Notary Public
My commissioner expires November 6, 2009  Noreen Buckley  Notary Public  My Commission Expired  November 6, 2009
IN WITNESS WHEREOF, I hereby set my hand and affix my seal this day of, 2004.
Marc Laverdiere
Waic Laverdiere
State of Massachusetts )
County of Middlesex )
On this day and year aforesaid, before me personally appeared Marc Laverdiere, known to me to be the person described in and the person who executed the foregoing instrument of assignment and he did acknowledge the same to be his free act and deed.
Noreen Buckley
Notary Public My commissioner expires November 6, 2009

• • • • • • • • • • • • • • • • • • •		hereby set my hand and affix my seal this day of
		Ralph Stankowski
State of Massachusetts	) ) ss	
County of Middlesex	)	
known to me to be the pers	son describ	d, before me personally appeared Ralph STANKOWSKI, bed in and the person who executed the foregoing instrument ge the same to be his free act and deed.
••••		
Notary Public My commissioner expires		
IN WITNESS WHEREOF, 200	•	set my hand and affix my seal this day of
		Joseph E. Smith
State of Massachusetts	(	
County of Middlesex	) ss )	
me to be the person describ	ed in and	d, before me personally appeared Joseph E. Smith, known to the person who executed the foregoing instrument of the same to be his free act and deed.
Noreen Buckley Notary Public My commissioner expires	November	6, 2009

## PATENT ASSIGNMENT

WHEREAS, We, and Karl J.Niermeyer, residing at 52 Groton Road, Tyngsboro, Massachusetts 01879, Marc Laverdiere, residing at 149 Broadway, Wakefield, MA 01880, Ralph J. Stankowski, residing at 18 Boutwell Road, Westford, Massachusetts 01886 and Joseph E. Smith, residing at 30 Penni Lane, North Andover, Massachusetts 01845, and all being citizens of the United States of America and, have made an invention which invention is claimed and described in an application for Letters Patent of the United States of American entitled "SEPARATION MODULE", filed herewith under Express Mail No.: EV113112272US in the U.S. Patent and Trademark Office, and

WHEREAS, Mykrolis Corporation having a place of business at 129 Concord Road, Billerica, Massachusetts 0821, a corporation organized and existing under the laws of the state of Delaware (hereinafter "Mykrolis"), is desirous of acquiring the entire right, title and interest in and to the invention and in and to any Letters Patent that may be granted therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned party by these presents do hereby sell, assign and transfer unto Mykrolis, its successors and assigns the full, exclusive and worldwide right to the said invention including the United States of America, and the entire right, title and interest in, to and under any Letters Patent which may be granted on said invention, or any part thereof, or on any continuation, division or reissue thereof in the Unites States of America, in the territorial possessions of the United States of America and in any country foreign to the United States of America, the same to be held and enjoyed by Mykrolis, its successors and assigns as fully and entirely as the same would have been held by me, had this assignment not be made; and

We hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and respective Patent Office officials in any country foreign to the United States of America to issue said Letters Patent to Mykrolis as the assignee of my entire right, title and interest in, to and under the same, and we hereby further authorize Mykrolis to apply for Letters Patent in my name or its own name, as it in its sole discretion sees fit, utilizing any benefits which may exist under any International Agreement, in any country foreign to the United States of America; and

We do hereby agree for myself and for my heirs, executors and administrators to execute any lawful documents and to testify as to any material fact or thing which Mykrolis, its successors and assigns may deem necessary in order to secure unto itself, its successors and assigns the full right, title and interest in and to and the full enjoyment of said invention or any part thereof and any Letters Patent, the same to be done without further consideration.

** IN WITNESS WHEREOF, I	hereby set my hand and affix my seal this day of
	Karl J. Niermeyer
State of Massachusetts ) ) ss County of Middlesex )	
• •	d, before me personally appeared Karl J. Niermeyer, known and the person who executed the foregoing instrument of the same to be his free act and deed.
Noreen Buckley Notary Public My commissioner expires November	6, 2009
IN WITNESS WHEREOF, I hereby:	set my hand and affix my seal this <u>Ith</u> day of
	Marc Laverdiere  Marc Laverdiere
State of Massachusetts ) ) ss	
	d, before me personally appeared Marc Laverdiere, known and the person who executed the foregoing instrument of the same to be his free act and deed.

My commissioner expires November 6, 2009

Noreen Buckley

Notary Public

Noreen Buckley Notary Public My Commission Expires November 6, 2009

'IN WITNESS WE		I hereby set my hand and affix my seal this day of	
		Ralph Stankowski	
State of Massachusetts County of Middlesex	) ) ss )		
On this day and year aforesaid, before me personally appeared Ralph STANKOWSKI, known to me to be the person described in and the person who executed the foregoing instrument of assignment and he did acknowledge the same to be his free act and deed.			
Notary Public My commissioner expires	3	·	
IN WITNESS WHEREO,		y set my hand and affix my seal this day of	
		Joseph E. Smith	
State of Massachusetts County of Middlesex	) ) ss )		
me to be the person descri	ibed in and	aid, before me personally appeared Joseph E. Smith, known the person who executed the foregoing instrument of the same to be his free act and deed.	
Noreen Buckley Notary Public My commissioner expires	November	er 6, 2009	

## PATENT ASSIGNMENT

WHEREAS, We, and Karl J.Niermeyer, residing at 52 Groton Road, Tyngsboro, Massachusetts 01879, Marc Laverdiere, residing at 149 Broadway, Wakefield, MA 01880, Ralph J. Stankowski, residing at 18 Boutwell Road, Westford, Massachusetts 01886 and Joseph E. Smith, residing at 30 Penni Lane, North Andover, Massachusetts 01845, and all being citizens of the United States of America and, have made an invention which invention is claimed and described in an application for Letters Patent of the United States of American entitled "SEPARATION MODULE", filed herewith under Express Mail No.: EV113112272US in the U.S. Patent and Trademark Office, and

WHEREAS, Mykrolis Corporation having a place of business at 129 Concord Road, Billerica, Massachusetts 0821, a corporation organized and existing under the laws of the state of Delaware (hereinafter "Mykrolis"), is desirous of acquiring the entire right, title and interest in and to the invention and in and to any Letters Patent that may be granted therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned party by these presents do hereby sell, assign and transfer unto Mykrolis, its successors and assigns the full, exclusive and worldwide right to the said invention including the United States of America, and the entire right, title and interest in, to and under any Letters Patent which may be granted on said invention, or any part thereof, or on any continuation, division or reissue thereof in the Unites States of America, in the territorial possessions of the United States of America and in any country foreign to the United States of America, the same to be held and enjoyed by Mykrolis, its successors and assigns as fully and entirely as the same would have been held by me, had this assignment not be made; and

We hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and respective Patent Office officials in any country foreign to the United States of America to issue said Letters Patent to Mykrolis as the assignee of my entire right, title and interest in, to and under the same, and we hereby further authorize Mykrolis to apply for Letters Patent in my name or its own name, as it in its sole discretion sees fit, utilizing any benefits which may exist under any International Agreement, in any country foreign to the United States of America; and

We do hereby agree for myself and for my heirs, executors and administrators to execute any lawful documents and to testify as to any material fact or thing which Mykrolis, its successors and assigns may deem necessary in order to secure unto itself, its successors and assigns the full right, title and interest in and to and the full enjoyment of said invention or any part thereof and any Letters Patent, the same to be done without further consideration.

'IN WITNESS WHER		hereby set my hand and affix my seal this day of
		Karl J. Niermeyer
State of Massachusetts	)	
County of Middlesex	) ss )	
to me to be the person descri	bed in a	d, before me personally appeared Karl J. Niermeyer, known nd the person who executed the foregoing instrument of the same to be his free act and deed.
Noreen Buckley Notary Public My commissioner expires No	ovembei	r 6, 2009
IN WITNESS WHEREOF, I	_	set my hand and affix my seal this day of
		Marc Laverdiere
State of Massachusetts	) ) ss	
County of Middlesex	,	
to me to be the person descri	bed in a	d, before me personally appeared Marc Laverdiere, known nd the person who executed the foregoing instrument of the same to be his free act and deed.
Noreen Buckley Notary Public My commissioner expires No	ovember	6, 2009

'IN WITNESS WHI		ereby set my hand and affix my seal this <u>2</u> day of
		-1.7
		Robbe
		Ralph Stankowski
State of Massachusetts	)	
County of Middlesex	) ss )	
	,	
known to me to be the pers	on described	before me personally appeared Ralph STANKOWSKI, d in and the person who executed the foregoing instrument the same to be his free act and deed.
Novem Buch	<u>'</u>	
Norean Buckley		
Notary Public Y My commissioner expires	ulalog	Noreen Buckley Notary Public My Commission Expires November 6, 2009
IN WITNESS WHEREOF, 200	-	et my hand and affix my seal this day of
	J	Joseph E. Smith
State of Massachusetts	) ss	
County of Middlesex	) ss )	
me to be the person describ	ed in and th	before me personally appeared Joseph E. Smith, known to be person who executed the foregoing instrument of e same to be his free act and deed.
Noreen Buckley Notary Public My commissioner expires N	November 6	2009

## **PATENT ASSIGNMENT**

. 1: 5

WHEREAS, We, and Karl J.Niermeyer, residing at 52 Groton Road, Tyngsboro, Massachusetts 01879, Marc Laverdiere, residing at 149 Broadway, Wakefield, MA 01880, Ralph J. Stankowski, residing at 18 Boutwell Road, Westford, Massachusetts 01886 and Joseph E. Smith, residing at 30 Penni Lane, North Andover, Massachusetts 01845, and all being citizens of the United States of America and, have made an invention which invention is claimed and described in an application for Letters Patent of the United States of American entitled "SEPARATION MODULE", filed herewith under Express Mail No.: EV113112272US in the U.S. Patent and Trademark Office, and

WHEREAS, Mykrolis Corporation having a place of business at 129 Concord Road, Billerica, Massachusetts 0821, a corporation organized and existing under the laws of the state of Delaware (hereinafter "Mykrolis"), is desirous of acquiring the entire right, title and interest in and to the invention and in and to any Letters Patent that may be granted therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned party by these presents do hereby sell, assign and transfer unto Mykrolis, its successors and assigns the full, exclusive and worldwide right to the said invention including the United States of America, and the entire right, title and interest in, to and under any Letters Patent which may be granted on said invention, or any part thereof, or on any continuation, division or reissue thereof in the Unites States of America, in the territorial possessions of the United States of America and in any country foreign to the United States of America, the same to be held and enjoyed by Mykrolis, its successors and assigns as fully and entirely as the same would have been held by me, had this assignment not be made; and

We hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and respective Patent Office officials in any country foreign to the United States of America to issue said Letters Patent to Mykrolis as the assignee of my entire right, title and interest in, to and under the same, and we hereby further authorize Mykrolis to apply for Letters Patent in my name or its own name, as it in its sole discretion sees fit, utilizing any benefits which may exist under any International Agreement, in any country foreign tot he United States of America; and

We do hereby agree for myself and for my heirs, executors and administrators to execute any lawful documents and to testify as to any material fact or thing which Mykrolis, its successors and assigns may deem necessary in order to secure unto itself, its successors and assigns the full right, title and interest in and to and the full enjoyment of said invention or any part thereof and any Letters Patent, the same to be done without further consideration.

	WHEREOF, I 2004.	hereby set my hand and affix my seal this day of
		Karl J. Niermeyer
State of Massachusetts	)	
County of Middlesex	) ss )	
to me to be the person of	described in a	d, before me personally appeared Karl J. Niermeyer, known nd the person who executed the foregoing instrument of the same to be his free act and deed.
Noreen Buckley Notary Public My commissioner expi	res November	r 6, 2009
	OF, I hereby 2004.	set my hand and affix my seal this day of
		Marc Laverdiere
State of Massachusetts	) ) ss	
County of Middlesex	)	
to me to be the person of	lescribed in a	d, before me personally appeared Marc Laverdiere, known and the person who executed the foregoing instrument of the same to be his free act and deed.
Noreen Buckley Notary Public My commissioner expir	es November	6, 2009

• • • N WITNESS WHERE(	OF, I hereby set my hand and affix my seal this day of
	Ralph Stankowski
State of Massachusetts )	se
County of Middlesex )	
known to me to be the person de	resaid, before me personally appeared Ralph STANKOWSKI, escribed in and the person who executed the foregoing instrument wledge the same to be his free act and deed.
Notary Public My commissioner expires	
IN WITNESS WHEREOF, I her	reby set my hand and affix my seal this <u>12</u> day of  Joseph E. Smith
State of Massachusetts ) ) s County of Middlesex )	s
On this day and year afor	resaid, before me personally appeared Joseph E. Smith, known to and the person who executed the foregoing instrument of

assignment and he did acknowledge the same to be his free act and deed.

Noreen Buckley

Notary Public

My commissioner expires November 6, 2009

**RECORDED: 03/12/2004** 

Noreen Buckley Notary Public My Commission Expires November 6, 2009