

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	RICHARD E. GAHAN	11/25/2015
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	HOLLINGSWORTH & VOSE COMPANY	
<b>Street Address:</b>	112 WASHINGTON STREET	
<b>City:</b>	EAST WALPOLE	
<b>State/Country:</b>	MASSACHUSETTS	
<b>Postal Code:</b>	02032	
<b>PROPERTY NUMBERS Total: 1</b>		
	<b>Property Type</b>	<b>Number</b>
	Application Number:	14509571
<b>CORRESPONDENCE DATA</b>		
<b>Fax Number:</b>	(617)646-8646	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>		
<b>Phone:</b>	6176468000	
<b>Email:</b>	PATENTS_ROBW@WOLFGREENFIELD.COM	
<b>Correspondent Name:</b>	WOLF, GREENFIELD & SACKS, P.C.	
<b>Address Line 1:</b>	600 ATLANTIC AVENUE	
<b>Address Line 4:</b>	BOSTON, MASSACHUSETTS 02210	
<b>ATTORNEY DOCKET NUMBER:</b>	H0818.70023US02	
<b>NAME OF SUBMITTER:</b>	MELANIE CHIOUSANO	
<b>SIGNATURE:</b>	/Melanie Chiusano/	
<b>DATE SIGNED:</b>	04/20/2017	
<b>Total Attachments: 3</b>		
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## ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

1. Sell, assign and transfer to Hollingsworth & Vose Company, a Massachusetts Corporation having a place of business at 112 Washington Street; East Walpole, Massachusetts 02032, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the application for United States Letters Patent filed in the United States Patent and Trademark Office on October 8, 2014 under No. 14/509,571, bearing Attorney Docket No. H0818.70023US02, and entitled WAVED FILTER MEDIA AND ELEMENTS, and in and to the application and all corresponding provisional, non-provisional, divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent, utility models, industrial designs or similar intellectual property rights which have been or shall be filed in the United States, internationally, and in any foreign country, including but not limited to China, Japan and Korea, on any of the inventions; and in and to all original and reissued patents which have been or shall be issued in the United States or any other jurisdiction on the inventions, including the right to apply for patent rights in each foreign country and all rights to priority, including the right to claim priority for China, Japan and Korea;
2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions in its own name; and when requested, without charge to but at the expense of the Assignee, I agree to carry out in good faith the intent and purpose of this assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and for vesting title to the inventions and all applications for patents and all patents on the inventions, in the Assignee;
3. Request the Director of the United States Patent and Trademark Office to issue the Letters Patent to the Assignee;
4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing patent/application identification information or correct any errors in the patent/application identification information provided above, whether discovered prior to or after recordation;
5. Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
6. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

12/1/2015  
Date

Inventor: David T. Healey  
Address: 89 High Ridge Road  
Bellingham, Massachusetts 02019  
Citizenship: US

STATE/Commonwealth of Massachusetts  
County of Norfolk

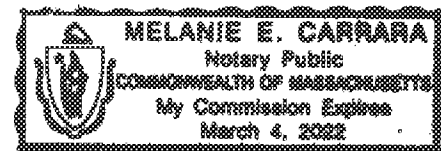
On this 1<sup>st</sup> day of December, 2015, before me, the undersigned notary public, personally appeared David T. Healey, proved to me through satisfactory evidence of identification, which were Driver's License to be the person who signed the preceding or attached document in my presence and swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.

SEAL

Melanie E. Carrara  
Notary Public

My commission expires:

March 4, 2022



Nov 25, 2015  
Date

Richard E. Gahan  
Inventor: Richard E. Gahan  
Address: 10 Saddleback Drive  
Wrentham, Massachusetts 02093  
Citizenship: US

STATE/Commonwealth of MA  
County of NORFOLK

On this 25<sup>th</sup> day of NOVEMBER, 2015, before me, the undersigned notary public,  
personally appeared Richard E. Gahan, proved to me through satisfactory evidence of  
identification, which were DRIVERS LICENSE  
to be the person who signed the preceding or attached document in my presence and swore or affirmed  
to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge  
and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.

SEAL

[Signature]  
Notary Public

My commission expires: My Commission Expires October 16, 2020

