

United States District Court,  
S.D. California.

**ZENON ENVIRONMENTAL, INC,**  
Plaintiff.

v.

**UNITED STATES FILTER CORPORATION,**  
Defendant.

Civil No. 03CV1996-B(AJB)

**Nov. 9, 2004.**

James T. Hannink, John David Kinton, Dla Piper US, San Diego, CA, for Plaintiff.

James L. Quarles, III, Wilmer Cutler Pickering Hale and Dorr LLP, Washington, DC, Kate Saxton, Michael J. Summersgill, Patrick M. Callahan, William F. Lee, Wilmer Cutler Pickering Hale and Dorr, LLP, Boston, MA, Mark D. Selwyn, Wilmer Cutler Pickering Hale and Dorr, Palo Alto, CA, Robert S Brewer, Jr, McKenna Long and Aldridge, San Diego, CA, for Defendant.

**ORDER CONSTRUING CLAIMS FOR U.S. PATENT NUMBER 6,620,319**

**RUDI M. BREWSTER, Senior District Judge.**

In the above identified cases, Zenon Environmental, Inc. ("Zenon") filed suit against Defendant United States Filter ("US Filter"), for patent infringement of United States Patent Number 6,620,319 ("the '319 patent"). FN1

Pursuant to Markman v. Westview Instruments, 52 F.3d 967 (Fed.Cir.1995), this Court conducted a hearing on November 1-3, 2004, to construe the disputed claims of the '319 patent.FN2 At the hearing, the law firm of Gray Cary Ware & Freidenrich LLP represented Zenon, and the law firm Wilmer Cutler Pickering Hale and Dorr LLP represented U.S. Filter.

The Court, with the assistance of the parties, prepared jury instructions interpreting the pertinent claims for all claim terms at issue in the '319 patent. Additionally, a "Glossary" was prepared for terms found in the '319 patent considered to be technical in nature and which a jury of laypersons might not understand without a specific definition. As the case advances, the parties may request additional terms to be added to the glossary as may seem helpful to the jury.

After careful consideration of the parties' arguments and the applicable law, the Court **HEREBY CONSTRUES** all disputed claim terms in the '319 patent, attached as Exhibit A. Further, the Court **HEREBY DEFINES** all pertinent technical terms as written in exhibit B, attached hereto.

## EXHIBIT A

CLAIM CONSTRUCTION CHART FOR UNITED STATES PATENT NUMBER 6,620,319	
VERBATIM CLAIM LANGUAGE	COURT'S CLAIM CONSTRUCTION
Claim 7.	Claim 7.
An apparatus for treating a multicomponent liquid substrate while leaving particulate matter therein, comprising,	An apparatus for treating <b>a multicomponent liquid substrate [a liquid containing particulate matter] while leaving particulate matter [filterable matter (including inorganic, organic and biological matter) of 0.1 microns and larger]</b> therein, comprising,
(a) a non-pressurized reservoir for containing the substrate;	(a) a <b>non-pressurized reservoir [a liquid receptacle at ambient (atmospheric) pressure]</b> for containing the substrate;
(b) a plurality of hollow fiber filtering membranes immersed in the substrate wherein the membranes are disposed generally vertically between upper and lower headers such that (I) outsides of ends of the membranes are sealingly secured to the headers in a closely spaced apart relationship, (ii) lumens of the membranes are in fluid communication with at least one permeate collection means, and, (iii) said membranes having a length between opposed surfaces of the headers such that the membranes may move against each other but wherein the length is less than 5% greater than the distance between opposed surfaces of the headers:	(b) a <b>plurality [two or more] of hollow fiber filtering membranes [porous or semipermeable material in the form of a capillary tube or hollow fiber for filtering substrate]</b> immersed in the substrate wherein the membranes are disposed generally vertically between upper and lower <b>headers [a solid body in which one of the terminal end portions of each one of a multiplicity of fibers in the skein is sealingly secured to preclude substrate from contaminating the permeate in the lumens of the fibers]</b> such that <b>(I) outsides of ends of the membranes [the circumference of the ends of each of the plurality of hollow fiber filtering membranes] are sealingly secured [held fast in a manner that prevents substrate from contaminating the permeate] to the headers in a closely spaced apart [from 1.2 diameter up to 5 diameter apart] relationship, (ii) lumens [the bore of the hollow fiber filtering membrane] of the membranes are in fluid communication with at least one permeate collection means, and, (iii) said membranes having a length between opposed surfaces of the headers such that the membranes may move against each other but wherein the length is less than 5% greater than the distance between opposed surfaces of the headers [the length is less than 1.05 times the distance between the opposed surfaces of the headers];</b>
(c) a pump in fluid communication with said lumens of said membranes, said pump operable to apply a suction to the lumens of the membranes to draw a component of the substrate as permeate through said membranes; and,	(c) a pump in fluid communication with said lumens of said membranes, said pump operable to apply a suction to the lumens of the membranes to draw a <b>component of the substrate as permeate [portion of the substrate that has passed through and been filtered by the membrane]</b> through said membranes; and,
(d) a gas distribution system having through-passages through the lower header to discharge bubbles into the substrate above	(no change) (d) a gas distribution system having through-passages through the lower header to discharge bubbles into the substrate above the lower header.

the lower header.	
Claim 8.	Claim 8.
The apparatus of claim 7 wherein the gas distribution system comprises a manifold, and the through-passages are connected to a source of pressurized gas through the manifold.	The apparatus of claim 7 wherein the gas distribution system comprises a <b>manifold [a pipe fitting with several lateral outlets for connecting one pipe with others]</b> , and the through-passages are <b>connected to a source of pressurized gas through the manifold [through-passages are connected to the pressurized gas source through the manifold]</b> .
Claim 9.	Claim 9.
The apparatus of claim 7 wherein the through-passages connect to a plenum directly below the lower header into which air may be introduced.	The apparatus of claim 7 wherein the through-passages connect to a <b>plenum [a space with an open bottom and opening at the top]</b> directly below the lower header into which air may be introduced.
Claim 10.	Claim 10. (no change)
The apparatus of claim 9 wherein openings of the through-passages are located between membranes.	The apparatus of claim 9 wherein openings of the through-passages are located between membranes.
Claim 11.	Claim 11.
The apparatus of claim 10 wherein the length is at least 0.1% but less than 1% longer than the distance between the opposed surfaces of the headers.	The apparatus of claim 10 wherein <b>the length is at least 0.1% but less than 1% longer than the distance between the opposed surfaces of the headers [the length of the fibers is more than 1.001 times but less than 1.01 times the distance between the opposed surfaces of the headers]</b> .
Claim 12.	Claim 12.
The apparatus of claim 7 wherein the length is at least 0.1% but less than 1% longer than the distance between the opposed surfaces of the headers.	The apparatus of claim 7 wherein <b>the length is at least 0.1% but less than 1% longer than the distance between the opposed surfaces of the headers [the length of the fibers is more than 1.001 times but less than 1.01 times the distance between the opposed surfaces of the headers]</b> .

## EXHIBIT B

<b>GLOSSARY OF TERMS FOR UNITED STATES PATENT NUMBER 6,620,319</b>	
<b>CLAIM TERMS<sup>[FN1]</sup></b>	<b>DEFINITIONS</b>
a multicomponent liquid substrate	a liquid containing particulate matter
particulate matter	filterable matter (including inorganic, organic and biological matter) of 0.1 microns and larger
non-pressurized reservoir	a liquid receptacle at ambient (atmospheric) pressure
lumens	the bore of the hollow fiber filtering membrane
the length is less than 5% greater than the distance between opposed surfaces of the headers	the length is less than 1.05 times the distance between the opposed surfaces of the headers

component of the substrate as permeate	portion of the substrate that has passed through and been filtered by the membrane
the length is at least 0.1% but less than 1% longer than the distance between the opposed surfaces of the headers	the length of the fibers is more than 1.001 times but less than 1.01 times the distance between the opposed surfaces of the headers
manifold	a pipe fitting with several lateral outlets for connecting one pipe with others
substrate	liquid to be filtered
skein	an integrated combination of structural elements including (I) a multiplicity of vertical fibers of substantially equal length; (ii) a pair of headers in each of which are potted the opposed terminal portions of the fibers so as to leave their ends open; and, (iii) permeate collection means held peripherally in fluid-tight engagement with each header so as to collect permeate from the ends of the fibers
diameter	distance from one outside surface to the other outside surface running through the center of the tube

FN1. The '319 patent issued on September 16, 2003, with 12 claims and is assigned to Zenon.

FN2. Claims 7-12 are disputed claims of the '319 patent.

FN1. The parties in this suit agreed to the definition of the terms "a multicomponent liquid substrate" through "manifold." The definitions of these terms also appear in the court's claim construction column. The definition of "skein" was extracted from the specification of the '319 patent. The remaining terms are technical terms the court construed to assist a jury of laypersons.

S.D.Cal., 2004.

Zenon Environmental, Inc. v. U.S. Filter Corp.

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