## UNITED STATES DISTRICT COURT DISTRICT OF MINNESOTA

No. 17-cv-01969-PJS-TNL

QXMédical, LLC,

Plaintiff and Counterclaim Defendant,

v.

Vascular Solutions, LLC and Teleflex Innovations S.à.r.l.'s,

Defendants and Counterclaim Plaintiffs.

QXMÉDICAL, LLC'S OPENING CLAIM CONSTRUCTION MEMORANDUM



### **TABLE OF CONTENTS**

				<u>Page</u>
TABLE OF	AUTH	IORITI	ES	iii
INTRODU	CTION			1
FACTUAL	BACK	GROU	ND	2
A.	VSI's Patents-In-Suit			2
	1.		Problem: Dislodgement of Standard Guide Catheters the Ostium of the Coronary Arteries	4
	2.	"Sub	Solution: a "Coaxial Guide Catheter" with a stantially Rigid" Portion formed from Cutdown stube	7
	3.	The A	Asserted Claims of the VSI Patents	11
В.	The I	The Hypothetical Person of Ordinary Skill in the Art		
ARGUMEN	NT			13
I.		LEGAL STANDARDS APPLICABLE TO CLAIM CONSTRUCTION		
II.	II. CONSTRUCTION OF THE DISPUTED CLAIM TERM			15
	A.	shoul	Nos. 1 and 2: "substantially rigid" and "flexible" d be construed according to the ordinary meaning of the s	16
		1.	The ordinary meanings of "substantially rigid" and "flexible" are consistent with the way the terms are used in the claims	17
		2.	QXM's proposed constructions are also supported by the patents' specification	18
		3.	QXM's proposed constructions are supported by the prosecution history	20
	R	Term	No. 4: "defining a rail structure without a lumen"	22



### CASE 0:17-cv-01969-PJS-TNL Document 56 Filed 03/14/18 Page 3 of 38

	1. "Defining a rail structure"	23
	2. "Without a Lumen"	26
C.	Term No. 5: "side opening" and "segment defining a partially cylindrical opening"	28
D.	Term Nos. 8, 9, and 10: "a material forming the segment defining the side opening," "partially cylindrical opening formed from a material," and "segment defining the partially cylindrical opening having an angled proximal end formed from a material"	31
CONCLUSION		22



#### **TABLE OF AUTHORITIES**

CASES	<u>'age</u>
Biogen, Inc. v. Berlex Labs., Inc., 318 F.3d 1132 (Fed. Cir. 2003)	. 15
BreathableBaby, LLC v. Crown Crafts, Inc., No. 12-CV-0094 (PJS/TNL), 2013 WL 5230724 (D. Minn. Sept. 17, 2013)	. 17
CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359 (Fed. Cir. 2002)	.14
Goodyear Dental Vulcanite Co. v. Davis, 102 U.S. 222 (1880)	. 15
GPNE Corp. v. Apple Inc., 830 F.3d 1365 (Fed. Cir. 2016)	.19
Halliburton Energy Servs. v. M-I LLC, 514 F.3d 1244 (Fed Cir. 2008)	. 17
Howes v. Med. Components, Inc., 814 F.2d 638 (Fed. Cir. 1987)	.27
ICU Med., Inc. v. Alaris Med. Sys., Inc., 558 F.3d 1368 (Fed. Cir. 2009)	. 19
Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed. Cir. 1995)	, 15
N. Am. Container, Inc. v. Plastipak Packaging, Inc., 415 F.3d 1335 (Fed. Cir. 2005)	2
Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005)	, 14
Regents of the Univ. of Minn. v. AGA Med. Corp., 660 F. Supp. 2d 1037 (D. Minn. 2009)	. 17
<i>Teva Pharm. USA, Inc. v. Sandoz, Inc.</i> , 789 F.3d 1335 (Fed. Cir. 2015)	.15



#### CASE 0:17-cv-01969-PJS-TNL Document 56 Filed 03/14/18 Page 5 of 38

Thorner v. Sony Computer Entm't Am. LLC, 669 F.3d 1362 (Fed. Cir. 2012)	1.4
	14
Trustees of Columbia Univ. in City of New York v. Symantec Corp., 811 F.3d 1359 (Fed. Cir. 2016)	14
VirnetX, Inc. v. Cisco Sys., Inc., 767 F.3d 1308 (Fed. Cir. 2014)	19
Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576 (Fed. Cir. 1996)	14, 15
York Prods., Inc. v. Cent. Tractor Farm & Family Ctr., 99 F.3d 1568 (Fed. Cir. 1996)	14
STATUTES	
35 U.S.C. § 112	17
35 U.S.C. 8 251	2



# DOCKET A L A R M

## Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## **Real-Time Litigation Alerts**



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## **Advanced Docket Research**



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

### **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

#### API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

#### **LAW FIRMS**

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

#### **FINANCIAL INSTITUTIONS**

Litigation and bankruptcy checks for companies and debtors.

#### **E-DISCOVERY AND LEGAL VENDORS**

Sync your system to PACER to automate legal marketing.

