## Filed on behalf of: Gold Standard Instruments, LLC

Paper No.

By: Joseph A. Hynds, Lead Counsel

R. Elizabeth Brenner-Leifer, Back-up Counsel

Steven Lieberman, Pro Hac Vice

Derek F. Dahlgren, Pro Hac Vice

Jason M. Nolan, Back-up Counsel

ROTHWELL, FIGG, ERNST & MANBECK, P.C.

607 14th Street, N.W., Suite 800

Washington, DC 20005 Phone: 202-783-6040

Facsimile: 202-783-6031

Emails: jhynds@rothwellfigg.com ebrenner@rothwellfigg.com slieberman@rothwellfigg.com ddahlgren@rothwellfigg.com jnolan@rothwellfigg.com

#### UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

US ENDODONTICS, LLC,

V.

Petitioner,

GOLD STANDARD INSTRUMENTS, LLC, Patent Owner.

Case IPR2015-00632 Patent 8,727,773 B2

### PATENT OWNER'S RESPONSE



# **TABLE OF CONTENTS**

TAB	LE OF	AUTI	HORITIES	V	
TAB	LE OF	ABBI	REVIATIONS	vii	
EXH	IBIT L	IST		ix	
I.	INTRODUCTION				
II.	THE '773 PATENT				
	A.	General Background of the '773 Patent			
		1.	How Endodontic Files are Used	3	
		2.	Dr. Luebke's Invention	6	
	B.	The C	Claims of the '773 Patent	8	
	C.	The f	field of invention and the person of ordinary skill in the art	9	
III.	CLAIM CONSTRUCTION				
	A.	The Board correctly determined that the limitation requiring that the heat-treated instrument exhibit at least 10 degrees of permanent deformation after the ISO Standard 3630-1 bend test should not be read out of the claims			
	B.	The E	Board correctly construed the claims as atmosphere-neutral	14	
IV.	KUHN DOES NOT ANTICIPATE CLAIMS 1, 2 OR 9-12.				
	A.	Kuhn does not teach or suggest making a permanently deformable file and does not show the specific level of deformation required by the claims			
	B.	Kuhn	nowhere teaches or suggests heat-treating the entire shank	17	
	C.	None of Kuhn's heat-treated shank pieces demonstrate at least 10 degrees of permanent deformation in the ISO test			
		1.	Kuhn does not identify the bend test used.	20	
		2.	Kuhn also explicitly states that the heat-treated shank pieces recovered their original shape	22	
		3.	The Figure 6A bending curves show heat-treated shanks that maintained their superelasticity.	24	



		4.	Kuhn's 2001 companion article—which Dr. Goldberg admits he never reviewed—confirms that the heat-treated shanks discussed in Kuhn are superelastic.	27	
		5.	The Fig. 4A DSC thermograms do not show that the heat- treated shanks would have at least 10 degrees of permanent deformation in the ISO test.	28	
		6.	Kuhn affirmatively teaches that superelasticity of NiTi files is a good thing and thus expressly teaches away from the claimed invention.	33	
V.			, 13, 15 AND 17 ARE NOT PRIMA FACIE OBVIOUS HN AND THE 1992 ISO	34	
	A.		992 ISO describes the recited bend test but nowhere sses NiTi files or heat-treatments.	34	
	B.		1992 ISO does not bridge gaps between Kuhn and the	35	
VI.	CLAIMS 1-17 ARE NOT PRIMA FACIE OBVIOUS OVER KUHN, THE 1992 ISO, MCSPADDEN, AND PELTON				
	A.	_	padden seeks to make a <i>stiffer</i> NiTi file, not a permanently mable file.	37	
	B.		n seeks to optimize superelasticity and nowhere teaches or ests making a permanently deformable file	42	
	C.		Cited References Do Not Teach or Suggest the Particular and Temperature Combinations of the '773 Patent	42	
	D.	•	between Kuhn and the claimed invention	43	
VII.	CLAIMS 1-17 ARE NOT PRIMA FACIE OBVIOUS OVER MATSUTANI, PELTON AND THE 1992 ISO			47	
	A.	super	utani is interested in making a NiTi endodontic file that is relastic everywhere except for the very tip, and he urages heat-treating the entire file shank.	47	
	B.		n and the 1992 ISO cannot compensate for the fact that utani's file is superelastic everywhere except for the tip	52	
	C.		Combination of Matsutani, Pelton, and the 1992 ISO Does	52	



VIII.	OBJECTIVE EVIDENCE CONFIRMS THE NOVELTY AND NON- OBVIOUSNESS OF THE CLAIMED INVENTION		
	A.	Dr. Luebke's invention met a long-felt need for an endodontic file that navigates the canal better and fractures less—problems others failed to solve	56
	B.	Skepticism by Experts confirms the patentability of the invention.	58
	C.	The invention has enjoyed commercial success	58
	D.	The invention has been copied by others, including Petitioner	58
	E.	Praise by others	59
IX.	CONCLUSION		60



## **TABLE OF AUTHORITIES**

## Cases

Apple Inc. v. ITC, 725 F.3d 1356 (Fed. Cir. 2013)	54
Depuy Spine, Inc. v. Medtronic Sofamor Danek, Inc., 567 F.3d 1314 (Fed. Cir. 2009)	42
Ecolochem, Inc. v. S. Cal. Edison Co., 227 F.3d 1361 (Fed. Cir. 2000)	55
In re Cuozzo Speed Techs., LLC., 778 F.3d 1271 (Fed. Cir. 2015)	15
<i>In re Gurley</i> , 27 F.3d 551 (Fed. Cir. 1994)	48
In re Rosenberger, 386 F.2d 1015 (C.C.P.A. 1967)	40
InTouch Techs., Inc. v. VGo Commc'ns., Inc., 751 F.3d 1327 (Fed. Cir. 2014)	49
Leo Pharm. Prods. v. Rea, 726 F.3d 1346 (Fed. Cir. 2013)	54
Plantronics, Inc. v. Aliph, Inc., 724 F.3d 1343 (Fed. Cir. 2013)	54
Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc., 699 F.3d 1340 (Fed. Cir. 2012)	54
W.L. Gore & Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540 (Fed. Cir. 1983)	49
Statutes	
35 U.S.C. § 102(b)	1
35 U.S.C. 8 103(a)	1



# 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.

