UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

WEATHERFORD INTERNATIONAL, LLC; WEATHERFORD/LAMB, INC.; WEATHERFORD US, LP; and WEATHERFORD ARTIFICIAL LIFT SYSTEMS, LLC

Petitioners

V.

PACKERS PLUS ENERGY SERVICES, INC.,

Patent Owner

Inter Partes Review No. IPR2016-01517 Patent 7,134,505

PETITIONERS' REPLY



TABLE OF AUTHORITIES

Brown & Williamson Tobacco Corp. v. Philip Morris, 229 F. 3d 1120 (Fed. Cir. 2000)		
	23	
ClassCo, Inc. v. Apple, Inc., 838 F. 3d 1214 (Fed. Cir. 2016)	19	
dunnhumby USA, LLC v. emnos USA Corp., 2015 WL 1542365 (N.D. III. A	Apr. 1,	
2015)	2	
Galderma Labs., L.P. v. Tolmar, Inc., 737 F.3d 731 (Fed. Cir. 2013)	8	
Graham v. John Deere Co. of Kansas City, 383 US 1, 36 (1966)	17	
In re Applied Materials, Inc., 692 F. 3d 1289 (Fed. Cir. 2012)	19	
KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398 (2007)	5, 6	
Leo Pharm. Products, Ltd. v. Rea, 726 F.3d 1346 (Fed. Cir. 2013)	22	
Merck & Co. v. Teva Pharms. USA, Inc., 395 F.3d 1364 (Fed. Cir. 2005)	23	
MPHJ Tech. Investments, LLC v. Ricoh Americas Corp., 847 F.3d 1363 (Fe	d. Cir.	
2017)	1, 2	
Ormco Corp. v. Align Tech., Inc., 463 F.3d 1299 (Fed. Cir. 2006)	22	
Power-One, Inc. v. Artesyn Technologies, Inc., 599 F. 3d 1343 (Fed. Cir. 2010).	24	
Ring Plus, Inc. v. Cingular Wireless, LLC, 2007 WL 5688765 (E.D. Tex. Jul 9, 2	2007) 2	
Tokai Corp. v. Easton Enters., Inc., 632 F.3d 1358 (Fed. Cir. 2011)	18	
Trustees of Columbia Univ. v. Symantec Corp., 811 F.3d 1359 (Fed. Cir. 2016)	3	
Vederi, LLC v. Google, Inc., 744 F.3d 1376 (Fed. Cir. 2014)	2, 3	



W. Union Co. v. Money Gram Payment Sys., Inc., 626 F.3	d 1361 (Fed. Cir. 2010)18
Wyers v. Master Lock Co., 616 F.3d 1231 (Fed. Cir. 2010)))18



TABLE OF CONTENTS

I.	INTR	ODUCTION	1
II.	CLAI	M CONSTRUCTION	1
III.	THE	CHALLENGED CLAIMS ARE INVALID	3
	A.	PO's Admissions Establish That It Would Have Been Obvious	to Use
Tl	homson	in Open-Hole	3
	B.	PO's Mischaracterizations of Yost Highlight the Weakness of Its P	osition
		7	
	C.	PO's Criticisms of Ellsworth Are Irrelevant	16
	D.	Claim 9 Also Would Have Been Obvious	16
	E.	PO's Secondary Indicia Evidence Fails	17
	1	The Secondary Consideration Arguments Are Moot	17
	2	2. PO's Commercial Success Evidence Fails	17
	3	3. PO's Commercial Success Evidence Has No Nexus to the Claims	s18
	4	4. The Alleged Commercial Success Is Due to Intervening	Factors
	Unrelat	ted to the Claimed Methods	20
	F.	PO's Conventional Wisdom and Surprising Results Arguments Fai	121
	G.	PO's Industry Praise Arguments Fail	23



Exhibit List

Exhibit	Description
1001	U.S. Patent No. 7,134,505 ("the '505 Patent")
1002	A.B. Yost, II, et al. Production and Stimulation Analysis of
	Multiple Hydraulic Fracturing of a 2,000-ft Horizontal Well, SPE
	(Society for Petroleum Engineering) 19090 (1989) ("Yost")
1003	D.W. Thomson, et al., Design and Installation of a Cost-Effective
	Completion System for Horizontal Chalk Wells Where Multiple
	Zones Require Acid Stimulation, SPE (Society for Petroleum
	Engineering) 37482 (1997) ("Thomson")
1004	B. Ellsworth, et al., Production Control of Horizontal Wells in a
	Carbonate Reef Structure, 1999 Canadian Institute of Mining,
	Metallurgy, and Petroleum Horizontal Well Conference
1007	("Ellsworth")
1005	Declaration of Rebekah Stacha of the Society of Petroleum
1006	Engineers
1006	Affidavit of Roberto Pellegrino
1007	Declaration of Vikram Rao
1008	Transcript of Continued Deposition of Daniel Jon Themig –
1011	01/08/2007
1011	Affidavit of Kevin Trahan
1012	Expert Report of Kevin Trahan
1013	First Supplemental Expert Report of Kevin Trahan
1014	Supplemental Engineering Report Prepared by Ronald A. Britton,
1015	P.E. U.S. Provisional Application No. 60/404,783
1016	U.S. Patent No. 3,062,291 to Brown
1017	U.S. Patent No. 2,738,013 to Lynes
1018	U.S. Patent No. 4,224,987 to Allen
1019	U.S. Patent No. 6,006,838 to Whiteley et al.
1020	Prosecution History of U.S. Patent No. 7,861,774
1021	Prosecution History of U.S. Patent No. 7,543,634
1022	Prosecution History of U.S. Patent No. 7,134,505
1023	Prosecution History of U.S. Patent No. 6,907,936
1024	U.S. Provisional Patent Application No. 60/331,491 filed on
	November 19, 2001.
1025	Hart Petroleum Volume 71, Number 6, June 1998
1026	Declaration of Christopher D. Hawkes, Ph.D., P.Geo.
1007	Darlandian Comis Audaman



DOCKET

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.

