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

> Case IPR2016-01517 Patent 7,134,505

EXCLUSIVE LICENSEE RAPID COMPLETIONS LLC'S RESPONSE

Mail Stop "PATENT BOARD" Patent Trial and Appeal Board U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450



TABLE OF CONTENTS

I.	Intro	oductio	n	1
II.	Ove	rview o	of the Patented Technology	1
III.	Claim Interpretation			3
	A.	Solid Body Packer		
IV.	Obviousness Analysis			6
	A.	The Level of Ordinary Skill in the Art		6
		1.	A POSITA Would Have Been Aware of a Variety of Different Completion Techniques	8
		2.	A POSITA Would Have Expected Multi-Stage Hydraulic Fracturing Operations to Require Cemented Casing	11
		3.	A POSITA Would Carefully Weigh the Risks, Reliability, and Economics of a Proposed Completion	15
		4.	Weatherford's Reliance on the Halliburton Litigation Materials Conflates Mechanical Packer Operation with Fracture Engineering	17
	B.	The Objective Indicia of Non-Obviousness		
		1.	The Claimed Technology Operates Contrary to the Accepted Wisdom That Prevailed at the Time of the Invention and it Demonstrated Unexpected Results	21
		2.	The Claimed Technology Has Received Industry Praise and Recognition	27
		3.	Baker Hughes Copied the Claimed Technology	31
		4.	The Claimed Technology Has Enjoyed Significant Commercial Success	37
		5.	There Is a Nexus Between the Claimed Technology and Its Commercial Success	41



	6.	The Length of Intervening Time Between the Asserted Prior Art Dates and the Claimed Invention Objectively Demonstrate that the Invention Was Not Obvious	44		
C.	The Scope and Content of the Prior Art				
	1.	Yost Describes an Experimental Operation That Teaches Away From Open Hole Multi-Stage Fracturing			
		a) Yost Describes an Experimental Operation, Not a Commercial Fracturing Operation	45		
		b) The Yost Experiments Would Lead a POSITA Away From Open Hole Multi-Stage Fracturing	46		
		c) Even Mr. Yost and the Department of Energy Elected Cased Hole Fracturing After the Publication of Yost	49		
	2.	Thomson Describes a Cased Hole Fracturing Operation, Not Fracturing Through Open Hole Segments	51		
	3.	Ellsworth Describes Water Shut-Off Operations, Not Hydraulic Fracturing.	53		
D.		Differences Between the Prior Art and the Claimed	56		
	1.	Petitioners Fail to Show that Yost Discloses the Solid Body Packers, Ball-Actuated Sleeves Limitations	56		
	2.	Petitioners Fail to Show that Thomson Discloses Positioning a Tubing String Adjacent an Open Hole Section of the Wellbore	56		
	3.	Petitioners Fail to Show That Ellsworth Discloses Forcing Wellbore Fluid out of the Tubing String Port	57		
Over	all Cor	nclusions on Obviousness	57		
A.		oners Fail to Demonstrate a Motivation to Combine	59		



V.

В.	The Objective Evidence Demonstrates that Petitioners'			
	Theories Are Flawed	63		
C.	Petitioners Fail to Demonstrate a Teaching of Isolating			
	Fracturing Fluid to the Claimed Open Hole Segments	65		



TABLE OF AUTHORITIES

Cases

Akamai Techs., Inc. v. Cable & Wireless Internet Servs., Inc. 344 F.3d 1186 (Fed.Cir.2003)	32
Amkor Tech., Inc. v. Int'l Trade Comm'n 692 F.3d 1250 (Fed. Cir. 2012)	59
Apple Inc. v. Samsung Elecs. Co. No. 2015-1171, 2016 WL 5864573 (Fed. Cir. Oct. 7, 2016)	, 38
Ashland Oil, Inc. v. Delta Resins & Refractories, Inc. 776 F.2d 281 (Fed. Cir. 1985)	', 38
Black & Decker, Inc. v. Positec USA, Inc. No. 2015-1646, 2016 WL 2898012 (Fed. Cir. May 18, 2016) 58	5, 59
Crocs, Inc. v. Int'l Trade Comm'n 598 F.3d 1294 (Fed.Cir.2010)	21
lunnhumby USA, LLC v. emnos USA Corp. No. 13-CV-0399, 2015 WL 1542365 (N.D. III. Apr. 1, 2015)	5
Oynamic Drinkware, LLC v. Nat'l Graphics, Inc. 800 F.3d 1375 (Fed. Cir. 2015)	58
Envtl. Designs, Ltd. v. Union Oil Co. of California 713 F.2d 693 (Fed. Cir. 1983)	7
Gambro Lundia AB v. Baxter Healthcare Corp. 110 F.3d 1573 (Fed. Cir. 1997)	41
Graham v. John Deere Co. of Kansas City 383 U.S. 1 (1966)	<i>6</i>



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.

