

Paper No. _____

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GREENE'S ENERGY GROUP, LLC

Petitioner

v.

OIL STATES ENERGY SERVICE, L.L.C.

Patent Owner

Patent No. 6,179,053

Issue Date: January 30, 2001

Title: LOCKDOWN MECHANISM FOR WELL TOOLS REQUIRING FIXED-
POINT PACKOFF

Inter Partes Review No. Unassigned

DECLARATION OF DON W. SHACKELFORD

1. I, Don W. Shackelford, a resident of Houston, Texas, hereby declare as follows:

2. I have been retained by Foley & Lardner LLP to provide my opinion concerning the validity of U.S. Pat. No. 6,179,053 (“the '053 patent”) (Ex. 1001). I am being compensated for my time at the rate of \$400 per hour.

3. My declaration contains the following sections:

I.	Introduction And Qualifications	4
II.	Understanding of the Governing Law.....	5
A.	Types Of Claims – Independent And Dependent	5
B.	Invalidity By Anticipation Or Obviousness.....	5
C.	Secondary Or Objective Evidence Of Obviousness Or Nonobviousness.....	6
D.	Interpreting Claims Before The Patent Office	7
E.	Relevant Time Period For The Obviousness Analysis	8
F.	Basis For My Opinion.....	9
G.	Level Of Ordinary Skill In The Art In The Relevant Timeframe	9
H.	Perspective Applied In This Declaration	10
III.	Introduction To The ‘053 Patent.....	10
IV.	Introduction To The Claims And Structures ‘053 Patent	15
A.	Overview of Claim 1.....	16
B.	Fig. 1 Embodiment: Corresponding Structures for “first lockdown mechanism” and “second lockdown mechanism”	17
C.	Fig. 5 Embodiment: Corresponding Structures for “first lockdown mechanism” and “second lockdown mechanism”	19
D.	Claim term “fixed-point packoff”	21
V.	Detailed Explanation of Claim Terms	22
A.	“Operative Position”: (Claims 1 and 22)	22
B.	“Fixed-Point Packoff” (Claim 1) “Fixed-Point For Packoff” / “Fixed-Point In The Well”/ “Fixed-Point” (Claim 22).....	23
C.	“First Lockdown Mechanism”: (Claims 1 and 22).....	24
D.	“Second Lockdown Mechanism”: (Claims 1 and 22).....	25
E.	Order of Certain Steps in Method Claim 22	27
F.	Patent Owner Potential Interpretation.....	27

VI.	Introduction to Canadian Patent Application 2,195,118 - “Dallas”	28
VII.	Introduction to U.S. Patent 4,632,183 – “McLeod”	31
	A. Background of McLeod	31
	B. Use of McLeod’s Adapter with Dallas’ Tool	34
VIII.	Ground 1 of Invalidity – Dallas and McLeod	36
	A. Dallas and McLeod: Independent Apparatus Claim 1	37
	1. Claim 1: Preamble:	37
	2. Claim 1: First Body Limitation (a):	37
	3. Claim 1: Second Body Limitation (b):	40
	4. Claim 1: Third Body Limitation (c):	43
	B. Dallas and McLeod: Independent Method Claim 22	46
	1. Claim 22: Preamble:	46
	2. Claim 22: First Body Limitation (a.1):	46
	3. Claim 22: Second Body Limitation (a.2):	47
	4. Claim 22: Third Body Limitation (a.3):	48
	5. Claim 22: Fourth Body Limitation (b):	49
	6. Claim 22: Fifth Body Limitation (c):	50
	7. Claim 22: Sixth Body Limitation (d):	51
IX.	Ground 2 of Invalidity – Dallas Alone	51
	A. Dallas: Independent Apparatus Claim 1	52
	1. Claim 1: Second Body Limitation (b):	53
	2. Claim 1: Third Body Limitation (c):	54
	B. Dallas: Independent Method Claim 22	54
	1. Claim 22: Second Body Limitation (a.2):	55
	2. Claim 22: Third Body Limitation (a.3):	55
	3. Claim 22: Fourth Body Limitation (b):	56
	4. Claim 22: Fifth and Sixth Body Limitations (c) and (d):	58
X.	Introduction to U.S. Pat. 4,076,079 - “Herricks”	58
	A. Background of Herricks	58
	B. Herricks Discloses a Wellhead Isolation Tool for Securing a Mandrel That Allows for Fixed Point Packoff	59
	C. Herricks Does Not Disclose Adjusting the Position of the Mandrel Relative to the Wellhead Components	61
XI.	Introduction to U.S. Pat. 2,927,643 – Dellinger	62
	A. Dellinger Background	62
	B. Dellinger Describes the Same Basic Mandrel as Herricks	63
	C. Dellinger’s Mandrel Movement and Securement Structure	64
	D. Use of Dellinger’s Mandrel Movement and Securement Structure to Move and Secure Herricks Mandrel	66
XII.	Ground 3 of Invalidity – Herricks and Dellinger	69
	A. Herricks and Dellinger: Independent Apparatus Claim 1	69

1.	Claim 1: Preamble:	69
2.	Claim 1: First Body Limitation (a):	70
3.	Claim 1: Second Body Limitation (b):.....	71
4.	Claim 1: Third Body Limitation (c):.....	73
B.	Herricks and Dellinger: Independent Method Claim 22.....	76
1.	Claim 22: Preamble:	76
2.	Claim 22: First Body Limitation (a.1):	76
3.	Claim 22: Second Body Limitation (a.2):.....	77
4.	Claim 22: Third Body Limitation (a.3):.....	78
5.	Claim 22: Fourth Body Limitation (b):.....	78
6.	Claim 22: Fifth Body Limitation (c):.....	79
7.	Claim 22: Sixth Body Limitation (d):.....	79
XIII.	Overall Conclusion	80

I. Introduction And Qualifications

4. I am a retired Senior Well Control Engineer with Boots and Coots (International Well Control)(now a division of Halliburton Services). I received my Bachelor’s and Master’s degrees in Mechanical Engineering from Texas Tech University in 1969 and 1972, respectively. I have over 40 years of experience in the oil and gas well industry, starting with my first position as an engineer with Halliburton Services following conferral of my undergraduate engineering degree. During that time, I have accrued significant engineering experience in the field including jobs with Domestic General Services that involved well fracturing and the use of wellhead isolation tools, as explained in more detail by my resume, which is appended to this declaration.

5. In addition to my practical engineering experience, I have been the recipient of a number of achievement awards throughout my career, all of which

are listed in my attached resume. I have also authored or co-authored a number of published technical papers directed to engineering aspects of the oil and gas industry. Additionally, I am the named inventor named on two issued U.S. patents relating to oil and gas well technology (U.S. Pat. Nos. 5,209,108 and 4,850,108). Lastly, I am also a distinguished member of a variety of professional organizations including the Society of Petroleum Engineers of which I have been a member for over 10 years.

II. Understanding of the Governing Law

A. Types Of Claims – Independent And Dependent

6. I understand that there are two types of U.S. patent claims: 1) independent claims and 2) dependent claims. I understand that independent claims only include the aspects stated in the independent claim. I further understand that dependent claims include the aspects stated in that dependent claim, and any other aspects stated in any claim from which that dependent claim depends.

B. Invalidity By Anticipation Or Obviousness

7. I understand that a claim is invalid if it is anticipated or obvious. I understand that anticipation of a claim requires that every element of a claim is disclosed expressly or inherently in a single prior art reference, arranged as in the claim.

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.