

# *Inter Partes Review – Final Hearing*

*Weatherford Int'l, LLC, et al., v. Packers Plus Energy Servs., Inc.*

*Case IPR2016-01509 (U.S. Patent No. 7,861,774B2),*

*Case IPR2016-01514 (U.S. Patent No. 7,543,634B2),*

*Case IPR2016-01517 (U.S. Patent No. 7,134,505B2)*

Before the Honorable Scott Daniels, Neil Powell, and  
Carl DeFranco, Administrative Patent Judges

Counsel for Petitioners:

**Edell, Shapiro & Finnan, LLC**

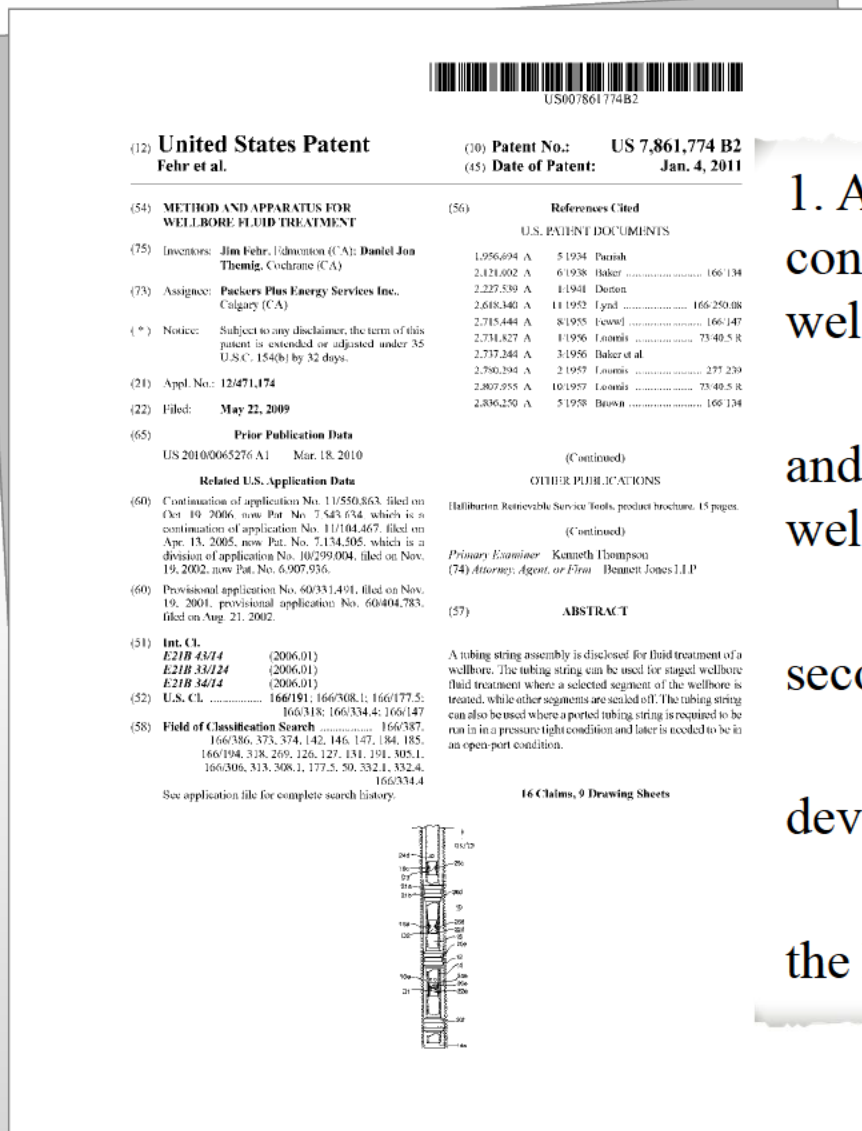
Jason Shapiro

Patrick Finnan

**Heim, Payne & Chorush LLP**

Douglas R. Wilson

# Challenged Claims - '774 Claims 1, 3-7, 9-10, 12, and 16



1. A *method* for *fracturing* a hydrocarbon-containing formation accessible through a wellbore, the method comprising:


running a tubing string into an open hole and uncased, non-vertical section of the wellbore . . . ;

expanding radially outward the first, second and third solid body packers . . . ;

conveying a fluid conveyed sealing device through the tubing string . . . ;

pumping fracturing fluid . . . to fracture the hydrocarbon-containing formation.

# Challenged Claims - '634 Claim 25



US007543634B2

(12) **United States Patent**  
Fehr et al.

(10) **Patent No.:** US 7,543,634 B2  
(45) **Date of Patent:** \*Jun. 9, 2009

(54) **METHOD AND APPARATUS FOR WELLBORE FLUID TREATMENT**

(75) Inventors: **Jim Fehr**, Edmonton (CA); **Daniel Jon Thwing**, Cochrane (CA)

(73) Assignee: **Packers Plus Energy Services Inc.**, Calgary (CA)

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.  
This patent is subject to a terminal disclaimer.

(21) Appl. No.: **11/550,863**

(22) Filed: **Oct. 19, 2006**

(65) **Prior Publication Data**  
US 2007/0151734 A1 Jul. 5, 2007

**Related U.S. Application Data**

(60) Continuation of application No. 11/104,467, filed on Apr. 13, 2005, now Pat. No. 7,134,505, which is a division of application No. 10/299,004, filed on Nov. 19, 2002, now Pat. No. 6,907,936.

(60) Provisional application No. 60/331,491, filed on Nov. 19, 2001, provisional application No. 60/604,783, filed on Aug. 21, 2002.

(51) Int. Cl.  
**E21B 43/14** (2006.01)  
**E21B 33/124** (2006.01)  
**E21B 34/14** (2006.01)

(52) U.S. CL. 166/191; 166/313; 166/373; 166/147; 166/318

(58) **Field of Classification Search** 166/387, 166/389, 373, 374, 142, 146, 147, 184, 185, 166/194, 318, 269, 126, 127, 131, 191, 305, 1, 166/306, 313; 175/237, 317  
See application file for complete search history.

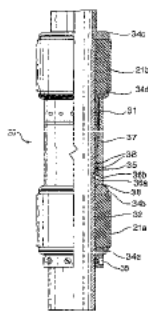
(56) **References Cited**  
U.S. PATENT DOCUMENTS  
1,956,694 A \* 5/1934 Punish ..... 277, 342  
2,271,539 A \* 1/1941 Dorton ..... 166, 70  
2,737,244 A \* 3/1956 Baker et al.  
3,654,415 A \* 9/1962 Baker et al.  
4,099,563 A \* 7/1978 Hutchinson et al.  
4,516,870 A \* 5/1985 Berry et al.  
4,520,870 A \* 6/1985 Pringle  
4,569,398 A \* 2/1986 Benco ..... 166, 305, 1  
4,794,989 A \* 1/1989 Mills ..... 166, 387  
4,801,678 A \* 1/1990 Stakley et al.  
4,949,788 A \* 8/1990 Szarka et al.  
(Continued)

**OTHER PUBLICATIONS**  
<http://www.packersplus.com/stock/0%202.htm> description of open hole packer, available prior to Nov. 19, 2001.  
(Continued)

**Primary Examiner:** Kenneth Thompson  
(74) **Attorney, Agent, or Firm:** Bennett Jones LLP

(57) **ABSTRACT**  
A tubing string assembly is disclosed for fluid treatment of a wellbore. The tubing string can be used for staged wellbore fluid treatment where a selected segment of the wellbore is treated, while other segments are sealed off. The tubing string can also be used where a ported tubing string is required to be run in to a pressure tight condition and later is needed to be in an open-port condition.

**25 Claims, 9 Drawing Sheets**



20. A *method* for fluid treatment of a borehole, the method comprising: ...

25. The method of claim 20 wherein when in a desired position the apparatus is adjacent an *open hole* section of the wellbore and the packers are set to seal the annulus between the apparatus and the wellbore wall.

# Challenged Claims - '505 Claims 23 and 27



(12) **United States Patent**  
**Fehr et al.**

(10) **Patent No.:** US 7,134,505 B2  
(45) **Date of Patent:** Nov. 14, 2006

(54) **METHOD AND APPARATUS FOR WELLBORE FLUID TREATMENT**

(75) Inventors: **Jim Fehr**, Edmonton (CA); **Daniel Jon Theinig**, Cochrane (CA)

(73) Assignee: **Packers Plus Energy Services Inc.**, Calgary (CA)

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **11/104,467**

(22) Filed: **Apr. 13, 2005**

(65) **Prior Publication Data**  
US 2005/0178552 A1 Aug. 18, 2005

(62) Division of application No. 10/299,004, filed on Nov. 19, 2002, now Pat. No. 6,907,936.

(60) Provisional application No. 60/404,783, filed on Aug. 21, 2002, provisional application No. 60/531,491, filed on Nov. 19, 2001.

(51) **Int. Cl.**  
**E21B 43/14** (2006.01)  
**E21B 33/124** (2006.01)  
**E21B 34/14** (2006.01)

(52) **U.S. Cl.** ..... **166/387**; 166/191; 166/194; 166/306; 166/318

(58) **Field of Classification Search** ..... 166/387, 166/386, 373, 374, 142, 146, 147, 184, 185, 166/194, 318, 269, 126, 127, 131, 191, 305.1, 166/306, 313; 175/237, 317  
See application file for complete search history.

(56) **References Cited**  
U.S. PATENT DOCUMENTS  
2,737,244 A 3 1956 Baker et al.

3,054,415 A 9 1962 Baker et al.  
4,099,563 A 7 1978 Hachison et al.  
4,530,870 A 6 1985 Pringle  
4,897,678 A 1 1990 Stakley et al.  
4,987,841 A 11 1990 Murray  
5,472,048 A 12 1995 Kennedy et al.  
5,499,647 A 3 1996 Lee  
5,526,800 A 6 1996 Jordan, Jr. et al.  
5,533,573 A 7 1996 Jordan, Jr. et al.  
5,966,381 A 10 1999 Altman et al.  
6,047,773 A 4 2000 Zlotman et al.  
6,253,861 B1 7 2001 Crumichard et al.  
6,488,082 B1 \* 12 2002 Echols et al. .... 166 54

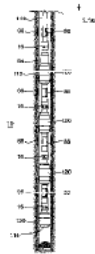
**OTHER PUBLICATIONS**  
http://www.packersplus.com/rockoff%202.htm description of open hole packer, available prior to Nov. 19, 2001.  
Design and installation of a Cost-Effective Completion System for Horizontal Chalk Wells Where Multiple Zones Require Acid Stimulation, D. W. Thompson, SPE Drilling & Completion, Sep. 1998, pp. 151-156.  
\* cited by examiner  
*Primary Examiner* Kenneth Thompson  
(74) *Attorney, Agent, or Firm* Bennett Jones LLP

(57) **ABSTRACT**  
A tubing string assembly is disclosed for fluid treatment of a wellbore. The tubing string can be used for staged wellbore fluid treatment where a selected segment of the wellbore is treated, while other segments are sealed off. The tubing string can also be used where a perforated tubing string is required to be run in a pressure tight condition and later is needed to be in an open-port condition.

**44 Claims, 9 Drawing Sheets**

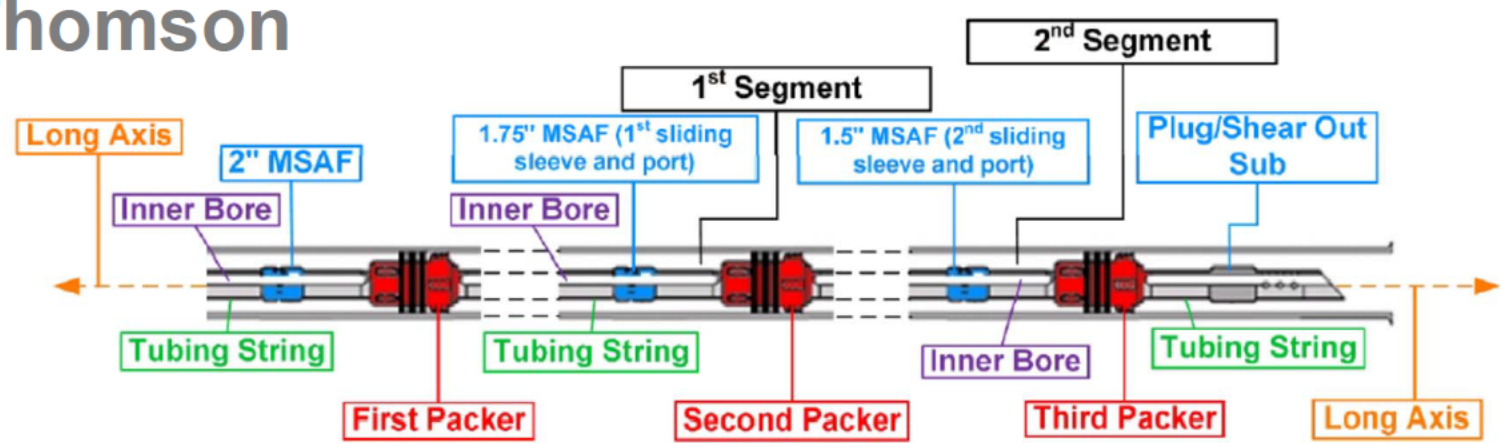
19/24. A **method** for fluid treatment of a borehole, the method comprising: ...

23/27. The method of claim 19/24 wherein when in a desired position the apparatus is adjacent an **open hole** section of the wellbore and the packers are set to seal the annulus between the apparatus and the wellbore wall.



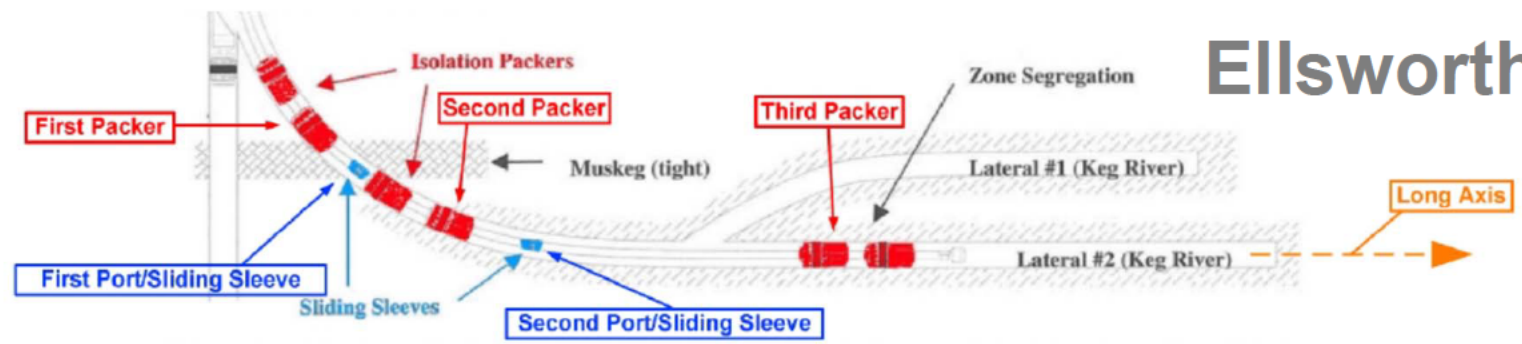
# Ground 2

## Thomson



+

## Ellsworth



# 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.