Trials@uspto.gov
571-272-7822

Paper 13
Entered: August 24, 2016

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

BAKER HUGHES INCORPORATED and
BAKER HUGHES OILFIELD OPERATIONS, INC.,
Petitioner,

v.

PACKERS PLUS ENERGY SERVICES, INC.,
Patent Owner.

---

Case IPR2016-00596
Patent 7,134,505 B2

---

Before SCOTT A. DANIELS, NEIL T. POWELL and
CARL M. DEFRANCO, *Administrative Patent Judges.*

POWELL, *Administrative Patent Judge.*

# DECISION TO INSTITUTE
*37 C.F.R. § 42.108*

## I. INTRODUCTION

This is a preliminary proceeding to decide whether *inter partes* review of U.S. Patent No. 7,134,505 B2 ("the '505 patent") should be instituted under 35 U.S.C. § 314(a). Packers Plus Energy Services Inc. ("Packers Plus") is the owner of the '505 patent. Baker Hughes Incorporated and Baker Hughes Oilfield Operations, Inc. ("Baker Hughes") filed a Petition ("Pet.") challenging claims 1–7, 11, and 14–27 of the '505 patent. Rapid Completions LLC, the exclusive licensee of the '505 patent, filed a Preliminary Response ("Prelim. Resp."). After considering the Petition and Preliminary Response, we institute *inter partes* review on all of the challenged claims.

## II. BACKGROUND

### *A. The '505 Patent*

The '505 patent describes a tubing string for treating a particular segment of a wellbore, while sealing off other segments. Ex. 1001, Abstract. Typically, a tubing string is run into a wellbore as a conduit for oil and gas products to flow to the surface. *Id*. at 1:23–43. But when natural formation pressure is insufficient, a well "stimulation" technique is employed, which involves injecting fracturing fluids into the formation to enlarge existing channels and thereby improve inflow into the wellbore. *Id*. at 1:30–34.

As described in the '505 patent, the tubing string includes a series of ports along its length, with a ball-actuated sliding sleeve mounted over each port, for selectively permitting the release of fluid from certain segments of the tubing string. *Id*. at 2:35–62, 6:41–7:36. Special sealing devices, called "solid body packers," are mounted along the length of the tubing string downhole and uphole of each port. *Id*. at 2:35–62, 6:8–40. The solid body

packers are disposed about the tubing string and seal the annulus between the tubing string and the wellbore wall, thereby dividing the wellbore into a series of isolated segments. *Id.* at 6:22–28. When the sliding sleeve over a particular port is activated to an open position, fluid can pass into one segment of the wellbore but is prevented from passing into adjacent segments by the packers positioned on either side of the port. *Id*. at 6:46–61.

*B. The Related District Court Action*

The '505 patent is involved in a concurrent district court action, *Rapid Completions LLC v. Baker Hughes Incorporated*, No. 6:15-cv-00724 (E.D. Tex.), which was filed July 31, 2015. Paper 5.

*C. The Challenged Claims*

Of the challenged claims, claims 1, 19, and 24 are independent. Claim 1 is illustrative, and is reproduced below.

> 1. An apparatus for fluid treatment of a borehole,
>
> the apparatus comprising a tubing string having a long axis,
>
> a first port opened through the wall of the tubing string,
>
> a second port opened through the wall of the tubing string,
>
> the second port offset from the first port along the long axis of the tubing string,
>
> a first packer operable to seal about the tubing string and mounted on the tubing string to act in a position offset from the first port along the long axis of the tubing string,
>
> a second packer operable to seal about the tubing string and mounted on the tubing string to act in a position between the first port and the second port along the long axis of the tubing string;
>
> a third packer operable to seal about the tubing string and mounted on the tubing string to act in a position offset from the second port along the long axis of the tubing string and on a side of the second port opposite the second packer,

> at least one of the first, second and third packer being a solid body packer each including multiple packing elements and a hydraulically actuated setting mechanism for at least one of the first, second and third packers to act on fluid pressure communicated to the mechanism from within the apparatus;
>
> a first sleeve positioned relative to the first port, the first sleeve being moveable relative to the first port between a closed port position and a position permitting fluid flow through the first port from the tubing string inner bore and a second sleeve being moveable relative to the second port between a closed port position and a position permitting fluid flow through the second port from the tubing string inner bore;
>
> and a sleeve shifting means for moving the second sleeve from the closed port position to the position permitting fluid flow,
>
> the means for moving the second sleeve selected to create a seal in the tubing string against fluid flow past the second sleeve through the tubing string inner bore.

Ex. 1001, 14:12–44 (line breaks added).

*D. The Asserted Grounds*

Baker Hughes contends that claims 1–7, 11, and 14–27 of the '505 patent are unpatentable under 35 U.S.C. §§ 102 and/or 103 based on the following grounds (Pet. 3–4):

| Ground | Reference(s) | Challenged Claims |
|---|---|---|
| § 102 | Thomson[1] | 1–7, 11, 14–22, and 24–26 |
| § 103 | Thomson and Hartley[2] | 15 |
| § 103 | Thomson and Ellsworth[3] | 23 and 27 |

[1] 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") (Ex. 1002).
[2] U.S. Patent No. 5,449,039 5,449,039, iss. Sep. 12, 1995 ("Hartley") (Ex. 1003).

| Ground | Reference(s) | Challenged Claims |
|---|---|---|
| § 103 | Thomson and Echols[4] | 11 |
| § 103 | Thomson and Brown[5] | 1–7, 11, 14–22, and 24–26 |
| § 103 | Thomson, Hartley, and Brown | 15 |
| § 103 | Thomson, Ellsworth, and Brown | 23 and 27 |
| § 103 | Thomson, Echols, and Brown | 11 |

As further support, Baker Hughes proffers the Declaration of Ali Daneshy, Ph.D. (Ex. 1005).

## III. ANALYSIS

In this preliminary proceeding, we determine whether Bakes Hughes has demonstrated a reasonable likelihood that "at least 1 of the claims challenged in the petition" is unpatentable. 35 U.S.C. § 314(a). As always, our goal is "the just, speedy, and inexpensive resolution" of the validity of the challenged claims. 37 C.F.R. § 42.1(b).

### *A. Claim Construction*

In the Petition, Baker Hughes proposes a construction for certain claim terms. Pet. 21–27. Packers Plus, in turn, states that it "disagrees" with Baker Hughes's proposed constructions and "intends to dispute them," but offers no construction of its own, except to say "there is no need for the Board to address these disputes now." Prelim. Resp. 18. We recognize that a patent owner is under no obligation to respond to the petition in a preliminary proceeding. Nonetheless, construing the claims at this stage

---

[3] 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 (1999) ("Ellsworth") (Ex. 1004).
[4] U.S. Patent No. 5,375,662 iss. Dec. 27, 1994 ("Echols") (Ex. 1005).
[5] U.S. Patent No. 4,018,272 iss. Apr. 19, 1977 ("Brown") (Ex. 1006).

DOCKET ALARM

# 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.