

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

PACKERS PLUS ENERGY SERVICES INC.,  
Patent Owner

Case IPR2016-00596  
Patent 7,134,505

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**DECLARATION OF MICHAEL P. DELANEY**

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

I, the below-named Declarant, state as follows:

1. My name is Michael P. Delaney, and I reside in Dallas, Texas.
2. I am a paralegal at the law firm of Caldwell, Cassady and Curry P.C.
3. Exhibit 2001 already on file is a true and correct copy of A. Casero, *Open Hole Multi-Stage Completion System in Unconventional Plays: Efficiency, Effectiveness and Economics*, SPE 164009 (2013).
4. Exhibit 2002 already on file is a true and correct copy of *Encyclopedia of Hydrocarbons*, Chapter 3.1: Upstream technologies.
5. Exhibit 2003 already on file is a true and correct copy of D. Lohoefer, *Comparative Study of Cemented versus Uncemented Multi-Stage Fractured Wells in the Barnett Shale*, SPE 135386, Society of Petroleum Engineers (2010).
6. Exhibit 2004 already on file is a true and correct copy of R. Seale *et al.*, *Effective Stimulation of Horizontal Wells—A New Completion Method*, SPE 106357, Society of Petroleum Engineers (2006).
7. Exhibit 2005 already on file is a true and correct copy of Exploration and Development, Alberta Oil Magazine.
8. Exhibit 2006 already on file is a true and correct copy of *Leading the Way: Multistage fracking pioneer Packers Plus plays major role in cracking the tight oil code*, Canadian OilPatch Technology Guidebook (2012).
9. Exhibit 2007 already on file is a true and correct copy of Financial Post, “*Entrepreneur of the Year: National Winner*”.
10. Exhibit 2008 already on file is a true and correct copy of *Innovation—Groundbreaking Innovation in Calgary*, Calgary Herald (Feb. 12, 1014).

11. Exhibit 2009 already on file is a true and correct copy of J. Chury, *Packers Plus Technology Becoming the Industry Standard*, The Oil Patch Report (Dec. 2010/Jan. 2011).
12. Exhibit 2010 already on file is a true and correct copy of P. Roche, *Open-Hole or Cased and Cemented*, New Technology Magazine (Nov. 2011).
13. Exhibit 2011 already on file is a true and correct copy of P. Roche, *Open-Hole or Cased and Cemented*, New Technology Magazine (Nov. 2011).
14. Exhibit 2012 already on file is a true and correct copy of Van Dyke, Kate, "*Fundamentals of Petroleum*," Fourth Ed. (1997).
15. Exhibit 2013 already on file is a true and correct copy of "Proven Performance: Read how Packers Plus systems and solutions have delivered results around the world," Packers Plus Energy Services Inc., accessed May 24, 2016.
16. Attached as Exhibit 2017 is a true and correct copy of Packers Plus advertising brochure (2010).
17. Attached as Exhibit 2018 is a true and correct copy of Baker Hughes, "FracPoint Completion System Isolated Openhole Horizontal Well in Lower Huron Shale" (2011).
18. Attached as Exhibit 2019 is a true and correct copy of Baker Hughes, "Enhancing Well Performance Through Innovative Completion Technologies," presentation, (Sept. 10-12, 2012).
19. Attached as Exhibit 2020 is a true and correct copy of Canadian Society for Unconventional Resources, Press Release, "Unconventional Industry Awards Innovative Thinking" (Oct. 3, 2012).
20. Attached as Exhibit 2021 is a true and correct bates-stamped copy of BH00364675, CONFIDENTIAL Ball activated sliding sleeves report.

21. Attached as Exhibit 2022 is a true and correct copy of Rigzone, Schlumberger Acquires Stake in Packers Plus (Nov. 22, 2005).
22. Attached as Exhibit 2023 is a true and correct copy of Britt, L. and Smith, M., *Horizontal Well Completion, Stimulation Optimization, and Risk Mitigation*, SPE 125526 (2009).
23. Attached as Exhibit 2024 is a true and correct copy of BH00363808, CONFIDENTIAL Baker Hughes Engineering Materials.
24. Attached as Exhibit 2025 is a true and correct copy of RC\_PAC00019434, CONFIDENTIAL Packers Plus Engineering Drawing.
25. Attached as Exhibit 2026 is a true and correct copy of Baker Hughes 2008 10-K Shareholder Report.
26. Attached as Exhibit 2027 is a true and correct copy of Baker Hughes 2010 10-K Shareholder Report.
27. Attached as Exhibit 2028 is a true and correct copy of Baker Hughes 2013 10-K Shareholder Report.
28. Attached as Exhibit 2029 is a true and correct copy of Packers Plus case study, StackFRAC system provides superior production economics.
29. Attached as Exhibit 2030 is a true and correct copy of Packers Plus Case Study, StackFRAC HD system enables high stimulation rates.
30. Attached as Exhibit 2031 is a true and correct copy of Packers Plus StackFRAC Video,  
<http://packersplus.com/solution/stackfrac-hd-system/>.

31. Attached as Exhibit 2032 is a true and correct copy of Baker Hughes FracPoint Video,  
<https://www.youtube.com/watch?v=s5ZQCRRZzXE>.
32. Attached as Exhibit 2033 is a true and correct copy of a Business News Network Packers Plus Feature video.
33. Attached as Exhibit 2038 is a true and correct copy of Ingersoll, C, "BP and the Deepwater Horizon Disaster of 2010" (Apr. 3, 2012).
34. Attached as Exhibit 2039 is a true and correct copy of Crosby, D.G., "Methodology to Predict the Initiation of Multiple Transverse Fractures from Horizontal Wellbores" (2001).
35. Attached as Exhibit 2040 is a true and correct copy of Kaiser, P., "Hydraulic Fracturing Mine Back Trials – Design Rationale and Project Status" (2013).
36. Attached as Exhibit 2041 is a true and correct copy of Stoltz, L.R., "Probabilistic Reserves Assessment Using A Filtered Monte Carlo Method In a Fractured Limestone Reservoir" SPE 39714 (1998).
37. Attached as Exhibit 2042 is a true and correct copy of Emanuele, M. A., "A Case History: Completion and Stimulation of Horizontal Wells with Multiple Transverse Hydraulic Fractures in the Lost Hills Diatomite" SPE 39941 (1998).
38. Attached as Exhibit 2043 is a true and correct copy of Gaynor, Tom M., "Tortuosity Versus Micro-Tortuosity – Why Little Things Mean a Lot" SPE/IADC 67818 (2001).
39. Attached as Exhibit 2044 is a true and correct copy of Cramer, David, "Stimulating Unconventional Reservoirs: Lessons Learned, Successful Practices, Areas for Improvement" SPE 114172 (2008).

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