

**IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF TEXAS  
HOUSTON DIVISION**

SCHLUMBERGER TECHNOLOGY  
CORPORATION,

Plaintiff,

v.

ENERPOL, LLC,

Defendant.

§  
§  
§  
§  
§  
§  
§  
§  
§  
§

Civil Action No. 4:19-cv-1196

**JURY TRIAL DEMANDED**

**PLAINTIFF’S ORIGINAL COMPLAINT**

Schlumberger Technology Corporation (“Schlumberger” or “Plaintiff”) brings this patent infringement action against Defendant EnerPol, LLC (“EnerPol” or “Defendant”) as follows:

**NATURE AND BASIS OF THE ACTION**

1. Schlumberger brings this civil action for infringement of United States Patent Nos. 7,775,278 (“278 Patent) and 6,820,694 (“694 Patent”) (collectively, the “Asserted Patents”) under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*

2. From its headquarters in Sugar Land, Texas, Schlumberger, along with its parent organization and affiliates, serves as the world’s leading provider of technology for reservoir characterization, drilling, production, and processing to the oil and gas industry. Schlumberger supplies the industry’s most innovative and comprehensive range of products and services, from exploration through production and integrated pore-to-pipeline solutions for hydrocarbon recovery that optimize reservoir performance. The Schlumberger family of companies employs more than 100,000 people around the world committed to the development and provision of oilfield services.

3. Schlumberger maintains its position as a world leader of oil and gas services through its significant investment in innovation and intellectual property. For example, in 2017 alone, Schlumberger companies spent more than \$750 million on research and engineering operations to develop novel and innovative well services techniques. Since 1974, Schlumberger has received more than 7,000 U.S. patents to protect its innovative technology.

#### **THE PARTIES**

4. Schlumberger is a Texas corporation, having its principal place of business at 300 Schlumberger Drive, Sugar Land, Texas 77478.

5. On information and belief, Defendant EnerPol is a Texas limited liability company having its principal place of business in this District at 13921 Hwy 105 West #339, Conroe, Texas 77304.

6. On information and belief, Defendant EnerPol has publicly touted its commercial products and/or services related to hydraulic fracturing for oil and gas applications. On information and belief, EnerPol maintains a website, [www.ener-pol.com](http://www.ener-pol.com), on which it advertises and/or has advertised certain well operation services and products, and on which it displays pictures of its employees and/or agents performing well operations. (**Exhibit A**, June 2017 archive of <http://ener-pol.com/products/squeezefrac>, at 1.)

7. On information and belief, Defendant EnerPol has advertised that it offers products and services designed to obtain oil from wells, including a product and service marketed as “SqueezeFrac,” which EnerPol describes as a “product and process that creates wide, highly-conductive fractures near the wellbore.” (**Exhibit A**, at 1.) On information and belief, EnerPol also has conducted field tests utilizing “SqueezeFrac,” including in this District. (**Exhibit B**, Field Demonstration of Eco-Friendly Creation of Propped Hydraulic Fractures, at 7, 10.)

8. On information and belief, in addition to performing and offering to perform “SqueezeFrac” and related commercial services, EnerPol has sold and/or offered for sale polymer materials and related chemical products for use in its services. (Exhibit C, October 2016 archive of <http://ener-pol.com/about-us/company/>, at 1.) To the extent EnerPol offers or has offered other well treatment products and services in addition to “SqueezeFrac” that fall within the scope of one or more claims of the Asserted Patents, Schlumberger also accuses those well treatment products and services. Collectively, “SqueezeFrac” and related commercial services, polymer materials and related chemical products for use in EnerPol’s services, and other well treatment products and services that fall within the scope of one or more claims of the Asserted Patents, are referred to herein as the “EnerPol Accused Products and Services.”

9. On information and belief, EnerPol has advertised and sold the EnerPol Accused Products and Services, including “SqueezeFrac,” since approximately 2012. At all times, the EnerPol Accused Products and Services made use of Schlumberger’s patented technologies without authorization or compensation.

### **JURISDICTION AND VENUE**

10. The Court has subject matter jurisdiction over these claims under 28 U.S.C. §§ 1331 and 1338(a) and the patent laws of the United States, 35 U.S.C. § 1 *et seq.*

11. The Court has personal jurisdiction over EnerPol because its principal place of business is in Texas, it is incorporated in Texas, it has availed itself of the rights and benefits of Texas law, and it has engaged in substantial and continuing contacts with Texas.

12. Venue is proper in the Southern District of Texas pursuant to 28 U.S.C. § 1400(b) for the reasons described in the following paragraphs.

13. On information and belief, EnerPol resides in this District.

14. On information and belief, EnerPol has committed acts of infringement in this District. For example, on information and belief, EnerPol has given presentations in Houston, Texas regarding its “SqueezeFrac” testing. (**Exhibit B**, at 1.) Those presentations state that EnerPol has performed infringing services in Bee County, Texas, within this District. (**Exhibit B**, at 7, 10.)

15. On information and belief, EnerPol maintains a regular and established place of business in this District, at 13921 Hwy 105 West #339, Conroe, Texas, 77304. On information and belief, EnerPol has maintained a corporate website stating that “EnerPol’s headquarters is just north of Houston in Conroe, Texas.” (**Exhibit C**, at 1.) In addition, EnerPol’s corporate registration statements have listed its headquarters in this District. (**Exhibit D**, 2017 Public Information Report, at 1.)

16. On information and belief, Claude E. Cooke, Jr. is the founder, President, and Chief Technology Officer of EnerPol, and resides in Conroe, Texas, which is within this District.

17. On information and belief, EnerPol transacts business in this District by, for example, selling or operating the EnerPol Accused Products and Services in this District.

#### **SCHLUMBERGER’S ASSERTED PATENTS**

18. The ’278 Patent is entitled “Degradable material assisted diversion or isolation,” and issued on August 17, 2010, to inventors Dean M. Willberg, Marina Bulova, Christopher N. Fredd, Alexey Vostrukhov, Curtis L. Boney, John Lassek, Ann M. W. Hoefer, and Philip F. Sullivan. A true and correct copy of the ’278 Patent is attached as **Exhibit E**. Schlumberger owns the entire right, title, and interest in and to the ’278 Patent. The ’278 Patent is valid and enforceable.

19. The ’694 Patent is entitled “Method for preparing improved high temperature fracturing fluids,” and issued on November 23, 2004, to inventors Dean Willberg and Michaela

Nagl. A true and correct copy of the '694 Patent is attached as **Exhibit F**. Schlumberger owns the entire right, title, and interest in and to the '694 Patent. The '694 Patent is valid and enforceable.

### **COUNTS OF PATENT INFRINGEMENT**

20. The allegations provided below are exemplary and without prejudice to Schlumberger's infringement contentions that will be provided pursuant to the Court's scheduling order and local rules. In providing these allegations, Schlumberger does not imply any particular claim constructions.

#### **COUNT ONE**

##### **(Infringement of the '278 Patent)**

21. Schlumberger repeats and realleges each of the allegations set forth above in paragraphs 1–20.

22. The '278 Patent regards a novel technology for using degradable material to form a temporary plug to treat a subterranean formation.

23. EnerPol has known of the '278 Patent at least as of the service of this Complaint.

24. In the interest of providing detailed averments of infringement, Schlumberger has identified below one exemplary claim to demonstrate infringement by one exemplary EnerPol Accused Product and Service based on EnerPol's publicly available literature and information. The selection of the exemplary claim and exemplary EnerPol Accused Product and Service should not be considered limiting, and any additional infringing EnerPol products or services and infringed claims of the '278 Patent will be disclosed in compliance with the Court's rules related to infringement contentions.

25. Claim 1 of the '278 Patent recites:

A method of well treatment, comprising:

- a) injecting a slurry comprising a degradable material, provided the degradable material is present in the slurry as a dispersed material;
- b) allowing the degradable material to form a plug in one or more than one of a perforation, a fracture, and a wellbore in a well penetrating a formation;
- c) performing a downhole operation; and
- d) allowing the degradable material to at least partially degrade after a selected duration such that the plug disappears.

26. On information and belief, EnerPol has performed, marketed, advertised, sold, and/or offered for sale the EnerPol Accused Products and Services, which infringe each and every limitation of claim 1 of the '278 Patent, literally and/or under the doctrine of equivalents.

27. The EnerPol Accused Products and Services comprise methods of well treatment, further comprising injecting a slurry comprising a degradable material, provided the degradable material is present in the slurry as a dispersed material, allowing the degradable material to form a plug in one or more than one of a perforation, a fracture, and a wellbore in a well penetrating a formation, performing a downhole operation, and allowing the degradable material to at least partially degrade after a selected duration such that the plug disappears, as outlined in detail below.

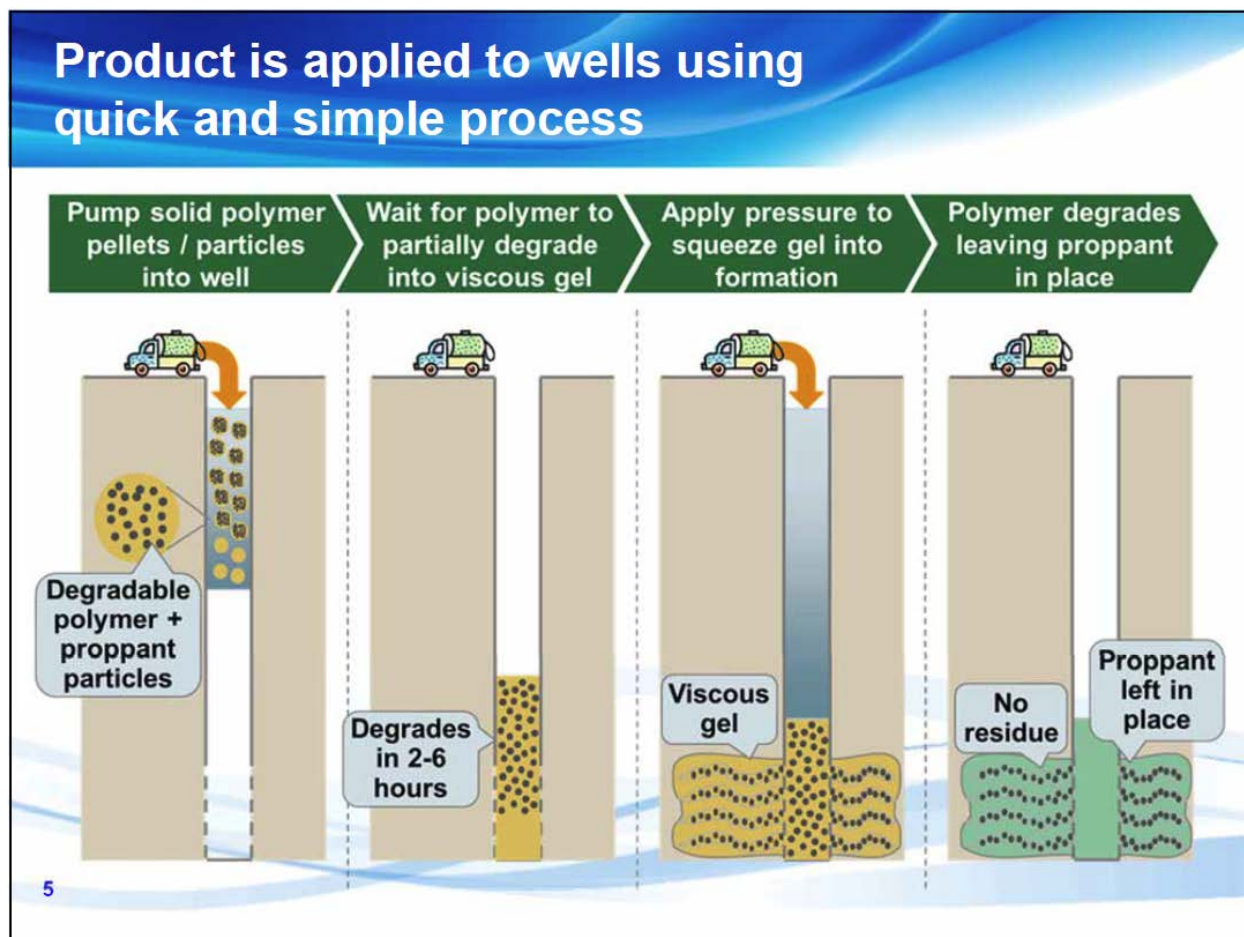
28. The EnerPol Accused Products and Services comprise methods of well treatment, further comprising injecting a slurry comprising a degradable material, provided the degradable material is present in the slurry as a dispersed material. According to EnerPol literature, "SqueezeFrac" involves injecting a fluid that degrades downhole and is used in diversion treatment of wells. Further, EnerPol literature states that "SqueezeFrac" is an aqueous slurry that can undergo hydrolysis. (**Exhibit G**, SPE 152189, Eco-Friendly Creation of Propped Hydraulic Fractures, at 4 ("When the slurry reaches bottom hole temperature, the pastilles begin to soften

and coalesce as the polymer hydrolysis (degradation) begins.”.) EnerPol literature also characterizes the “SqueezeFrac” product in this way:

The process uses a polymer introduced into the well bore as solid pellets containing proppant. The polymer degrades in the aqueous environment to form a viscous, proppant-containing gel fluid. The well is pumped to above fracturing pressure before the polymer degrades further, and the proppant/gel mix is injected into the induced fractures surrounding the well bore, penetrating on the order of tens of feet. The polymer continues to degrade to a clear aqueous fluid, leaving the proppant in the fractured, near-well-bore region.

(**Exhibit H**, RPSEA-Backed Fracture Technique Ready for Field Trials, at 1.)

29. The EnerPol Accused Products and Services comprise methods of well treatment that further comprise allowing the degradable material to form a plug in one or more than one of a perforation, a fracture, and a wellbore in a well penetrating a formation. For example, according to EnerPol literature, the slurry of degradable particles and fluid solid particles is placed into a wellbore until the perforations are plugged, treating the well in a way that increases well productivity. (See, e.g., **Exhibit B** at 5, 9.)



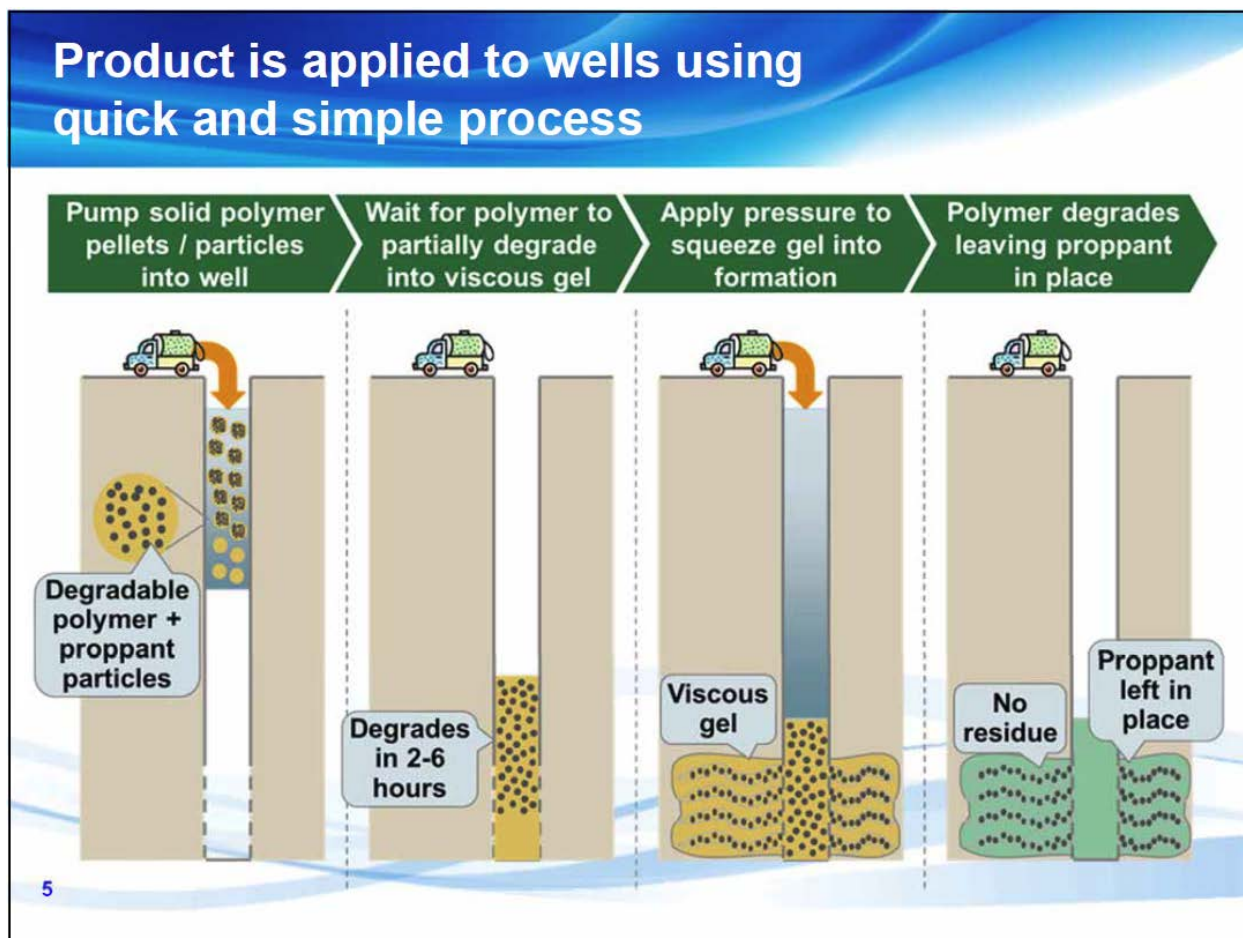
(**Exhibit B**, at 5.)

30. The EnerPol Accused Products and Services comprise methods of well treatment that further comprise performing a downhole operation. For example, according to EnerPol literature, after degradable material has formed a plug in a wellbore, “SqueezeFrac” includes the operation of “Apply[ing] pressure to squeeze gel into the formation.” (**Exhibit B**, at 5.) EnerPol marketing documents confirm that “SqueezeFrac” includes first “Inject[ing] polymer into [a] well,” and then performing the operation of “squeeze[ing] polymer and frac[turing] [the] well.” (**Exhibit I**, SqueezeFrac Field Testing, at 1.)

31. The EnerPol Accused Products and Services comprise methods of well treatment that further comprise allowing the degradable material to at least partially degrade after a



selected duration such that the plug disappears. For example, “SqueezeFrac” is performed by allowing the slurry of polymer to “degrade” such that it leaves “no residue.”



(Exhibit B, at 5.) EnerPol literature further describes this portion of the treatment procedure as “Wait[ing] ~7 days for polymer to completely degrade before swabbing.” (Exhibit B, at 7.)

32. On information and belief, without license or permission from Schlumberger, EnerPol has infringed and continues to infringe at least claim 1 of the '278 Patent by engaging in acts constituting infringement under 35 U.S.C. § 271, including but not necessarily limited to one or more of making, using, selling, and offering to sell, in the United States, and importing into the United States, certain products and services relating to using degradable material to form a temporary plug to treat a subterranean formation.

**COUNT TWO**  
**(Infringement of the '694 Patent)**

33. Schlumberger repeats and realleges each of the allegations set forth above in paragraphs 1–32.

34. The '694 Patent regards a novel technology for preparing improved high temperature fracturing fluids.

35. EnerPol has known of the '694 Patent at least as of the service of this Complaint.

36. In the interest of providing detailed averments of infringement, Schlumberger has identified below one exemplary claim to demonstrate infringement by one exemplary EnerPol Accused Product and Service. The selection of the exemplary claim and an exemplary EnerPol Accused Product and Service should not be considered limiting, and any additional infringing EnerPol products or services and infringed claims of the '694 Patent will be disclosed in compliance with the Court's rules related to infringement contentions.

37. Claim 1 of the '694 Patent recites:

A method for fracturing a subterranean formation comprising, in order, the steps of:

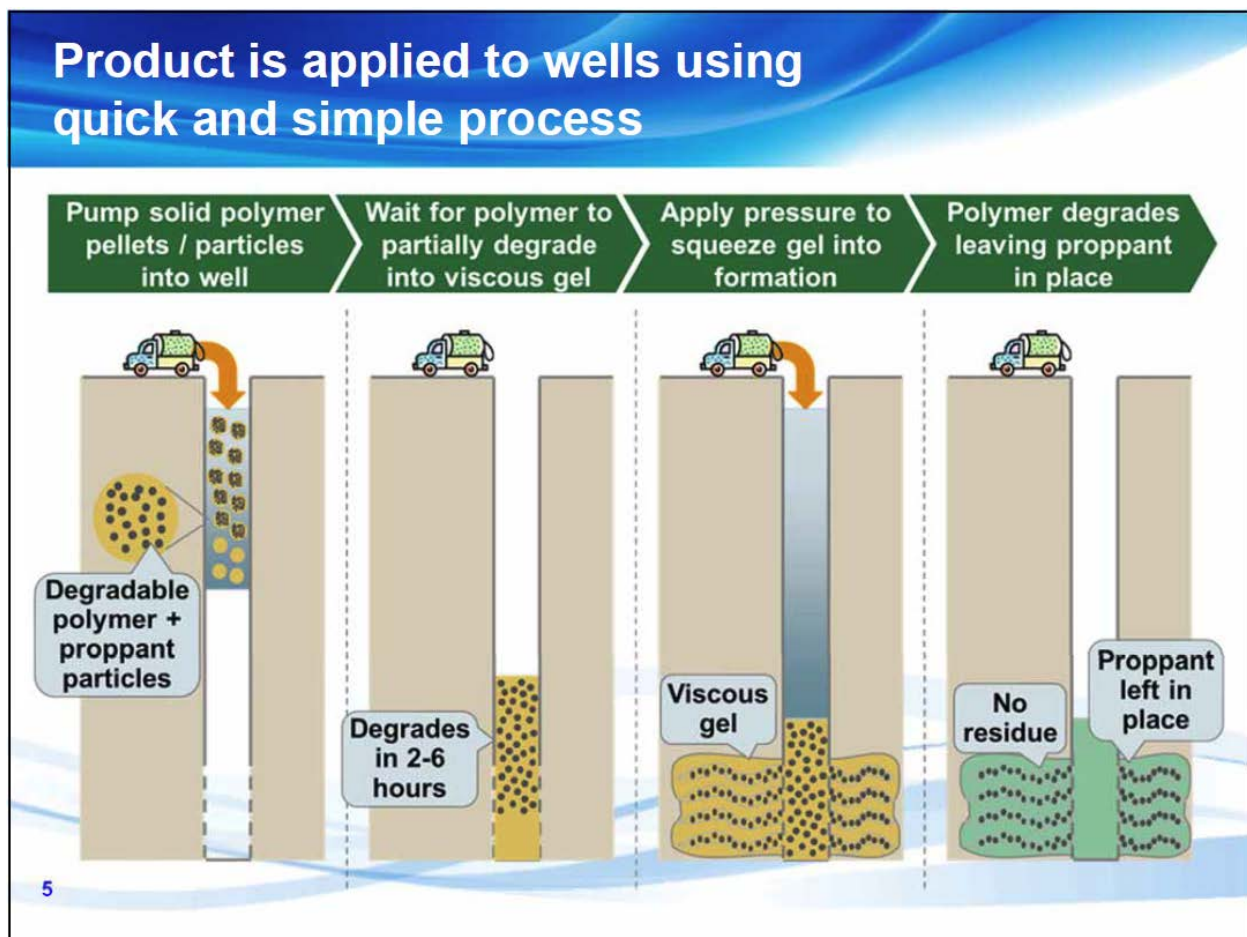
- (a) providing a water source;
- (b) adding a crosslinking agent to said water source;
- (c) adding a polymeric component to said water to create a fracturing fluid;
- (d) pumping said fracturing fluid into said formation.

38. On information and belief, EnerPol has performed, marketed, advertised, sold, and/or offered for sale the EnerPol Accused Products and Services, which infringe each and every limitation of claim 1 of the '694 Patent, literally and/or under the doctrine of equivalents.

39. The EnerPol Accused Products and Services comprise methods for fracturing a subterranean formation comprising, in order, the steps of providing a water source, adding a

crosslinking agent to said water source, adding a polymeric component to said water to create a fracturing fluid, and pumping said fracturing fluid into said formation, as outlined in detail below.

40. The EnerPol Accused Products and Services comprise methods for fracturing a subterranean formation. For example, according to EnerPol literature, a slurry of degradable particles and fluid solid particles is placed into a wellbore until the perforations are plugged, treating the well in a way that increases well productivity. (See, e.g., **Exhibit B** at 5, 9.)



(**Exhibit B**, at 5.) EnerPol documents confirm that “SqueezeFrac” includes first “Inject[ing] polymer into [a] well,” and then performing the operation of “squeez[ing] polymer and frac[turing] [the] well.” (**Exhibit I**, at 1.)

41. The EnerPol Accused Products and Services further comprise providing a water source. For example, the EnerPol website has described pumping polymer and proppant “into the wellbore *with water*.” (Exhibit A, at 1 (emphasis added).)

**SqueezeFrac process requires 4 steps:**

1. Small, solid particles of degradable polymer and proppant are pumped into the wellbore with water

(*Id.*)

42. On information and belief, the EnerPol Accused Products and Services further comprise adding a crosslinking agent to said water source. For instance, EnerPol literature describes testing as follows:

The large-scale tests performed with triplex “mud” pumps, were designed to test if the degradable polymer particles could successfully move through a triplex pump suspended in a slurry of gelled water. For the first test, cross-linked guar was mixed into 20 bbl of fluid by circulating the dry, water-soluble polymer through a centrifugal pump and an open-top tank. Once the guar had hydrated, polymer particles were added to the slurry at a low concentration and the triplex pump was engaged. The particles were circulated through the centrifugal (prime) pump and the triplex pump with no pressure on the system for 15 minutes.

(Exhibit J, Final Report – Field Demonstration of Eco-Friendly Creation of Propped Hydraulic Fractures, at 10). On information and belief, EnerPol performed this and similar testing, in combination with other described testing, that comprises adding a crosslinking agent to a water source.


43. On information and belief, the EnerPol Accused Products and Services further comprise adding a polymeric component to said water to create a fracturing fluid. For instance, EnerPol literature describes testing as follows:

The large-scale tests performed with triplex “mud” pumps, were designed to test if the degradable polymer particles could successfully move through a triplex

pump suspended in a slurry of gelled water. For the first test, cross-linked guar was mixed into 20 bbl of fluid by circulating the dry, water-soluble polymer through a centrifugal pump and an open-top tank. Once the guar had hydrated, polymer particles were added to the slurry at a low concentration and the triplex pump was engaged. The particles were circulated through the centrifugal (prime) pump and the triplex pump with no pressure on the system for 15 minutes.


**(Exhibit J**, at 10).

44. EnerPol literature further confirms that polymeric components were added to water to create a fracturing fluid. For example, EnerPol marketing materials describe the “SqueezeFrac” procedure as involving “Plac[ing] ~5 bbl particles into wellbore filled with water.” **(Exhibit B**, at 7.)

Treatment / Procedure	
<ul style="list-style-type: none"> <li>• Placed ~5 bbl particles into wellbore filled with water</li> <li>• Pumped degradable polymer particles down until perforations plugged</li> <li>• Waited ~6 hours for polymer particles to degrade into highly viscous gel</li> <li>• Using small frac pump, displaced gel through perfs &lt;2 bpm</li> <li>• Waited ~7 days for polymer to completely degrade before swabbing</li> </ul>	

*(Id.)*

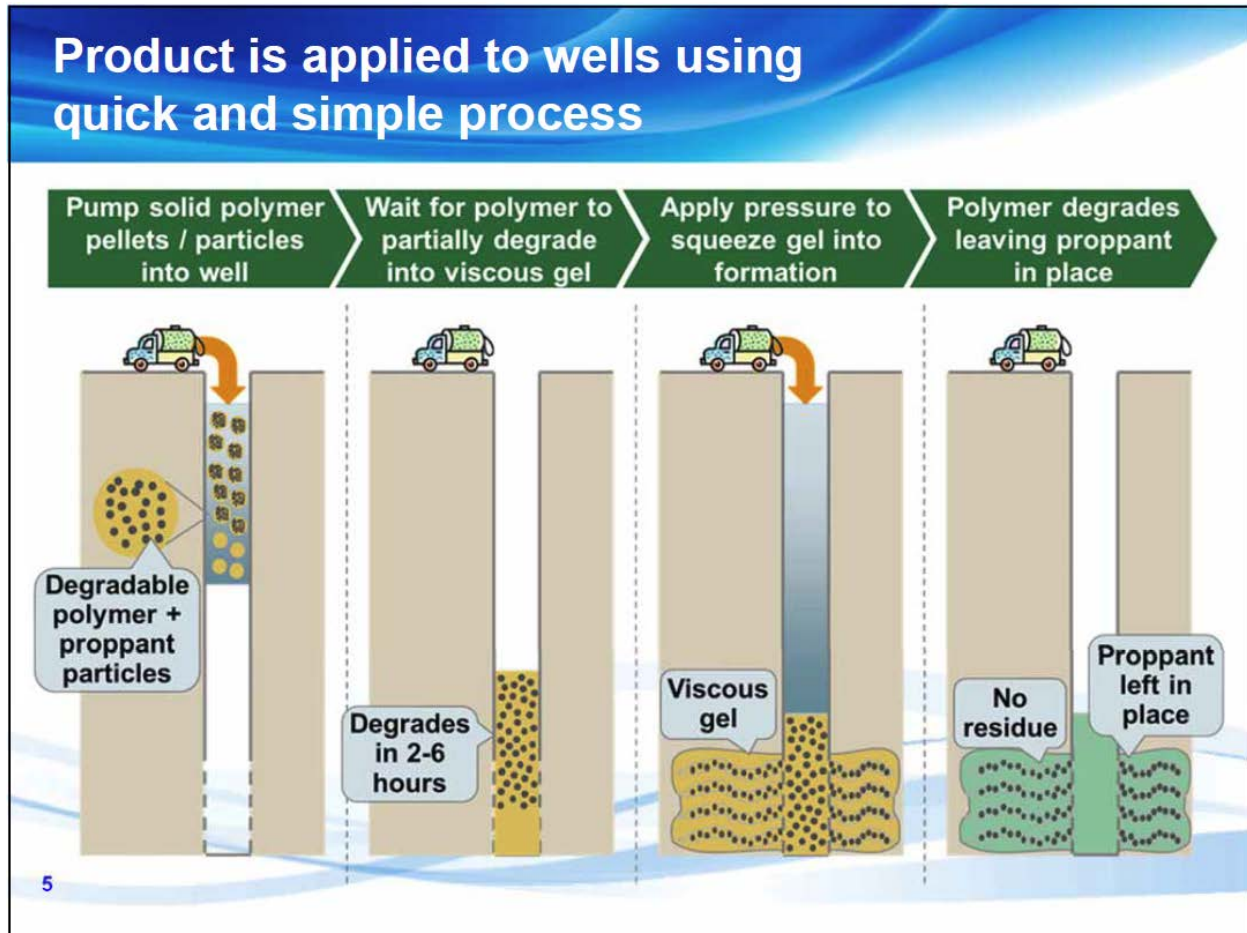
45. The EnerPol Accused Products and Services further comprise pumping said fracturing fluid into said formation. For example, according to EnerPol literature, the fluid containing degradable polymer particles is pumped into the wellbore, and then displaced through the perforations in the formation.

Treatment / Procedure	
<ul style="list-style-type: none"> <li>• Placed ~5 bbl particles into wellbore filled with water</li> <li>• Pumped degradable polymer particles down until perforations plugged</li> <li>• Waited ~6 hours for polymer particles to degrade into highly viscous gel</li> <li>• Using small frac pump, displaced gel through perfs &lt;2 bpm</li> <li>• Waited ~7 days for polymer to completely degrade before swabbing</li> </ul>	

**(Exhibit B**, at 7.)



46. EnerPol also describes this as “Pump[ing] solid polymer pellets / particles into well” and “apply[ing] pressure to squeeze gel into formation.” (See, e.g., **Exhibit B** at 5, 9.)



(**Exhibit B**, at 5.)

47. On information and belief, without license or permission from Schlumberger, EnerPol has infringed and continues to infringe at least claim 1 of the '694 Patent by engaging in acts constituting infringement under 35 U.S.C. § 271, including but not necessarily limited to one or more of making, using, selling, and offering to sell, in the United States, and importing into the United States, certain products and services relating to using methods for preparing improved high temperature fracturing fluids.

**DEMAND FOR JURY TRIAL**

48. Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Schlumberger respectfully requests a trial by jury of any and all issues on which a trial by jury is available under applicable law.

**RELIEF REQUESTED**

WHEREFORE, Schlumberger respectfully requests the following relief:

- A. Judgment of infringement of the '278 Patent against EnerPol;
- B. Judgment of infringement of the '694 Patent against EnerPol;
- C. Preliminarily and permanently enjoining EnerPol, its officers, agents, servants, employees and attorneys, and all those persons acting in concert or participation, from further acts of infringement;
- D. An award of damages adequate to compensate Schlumberger for the infringement that has occurred, pursuant to 35 U.S.C. § 284, including prejudgment and post-judgment interest;
- E. An award of treble damages for willful infringement pursuant to 35 U.S.C. § 284;
- F. An accounting and/or supplemental damages for all damages occurring after any discovery cutoff and through the Court's decision regarding the imposition of a permanent injunction;
- G. An award of attorneys' fees based on this being an exceptional case pursuant to 35 U.S.C. § 285, including prejudgment interest on such fees;
- H. Costs and expenses in this action; and
- I. An award of any additional relief, in law and in equity, as the Court deems just and reasonable.

Dated: April 2, 2019

Respectfully submitted,

/s/ Craig Smyser

Craig Smyser  
Texas Bar No. 18777575  
Federal Bar No. 848  
Samantha Jarvis  
Texas Bar No. 24089238  
Federal Bar No. 2774222  
SMYSER KAPLAN & VESELKA, L.L.P.  
700 Louisiana Street, Suite 2300  
Houston, Texas 77002  
Tel.: (713) 221-2300  
csmyser@skv.com  
sjarvis@skv.com

Herman H. Yue  
Texas Bar No. 24099071  
LATHAM & WATKINS LLP  
811 Main Street, Suite 3700  
Houston, Texas 36024  
Tel.: (713) 546-5400  
herman.yue@lw.com

Maximilian A. Grant (*Lead Attorney*)  
DC Bar No. 481610  
(*pro hac vice pending*)  
LATHAM & WATKINS LLP  
555 Eleventh Street, N.W., Suite 1000  
Washington, D.C. 20004  
Tel.: (202) 637-2200 (telephone)  
max.grant@lw.com

Gregory K. Sobolski  
CA Bar No. 267428  
(*pro hac vice pending*)  
LATHAM & WATKINS LLP  
505 Montgomery Street, Suite 2000  
San Francisco, California 94111  
Tel.: (415) 395-8035  
greg.sobolski@lw.com

***Attorneys for Plaintiff,  
Schlumberger Technology Corporation***