

DECLARATION OF ANDREW SHERMAN IN IPR2023-00521

I, Andrew Sherman, having personal knowledge and being competent to testify, declare as follows:

1. I am the Founder and President of Respondent Terves Inc. Terves has about 45 employees.
2. Terves is, among other things, a magnesium processor. Terves makes and sells products that practice claim 19 of the petitioned patent (among others), U.S. Patent No. 10,689,740 B2. Our customers use such products in the oil and gas industry, particularly as dissolvable fracking plugs.
3. Terves is currently under contract with the defense logistics agency (DLA), including contract SP4701-21-P-0096, where it is tasked with utilizing its magnesium processing infrastructure to produce critical rare earth metals, specifically gadolinium metal, to supply critical defense needs (in the absence of any other US source).
4. Terves manufactures commercial embodiments of the invention within the first United States facility built in the past 50 years for the secondary processing of magnesium. Terves provides critical products that are necessary for the integrity of a number of US supply chains.
5. The following true description of Terves is published on our website at www.tervesinc.com:

Company

Terves is the technology and cost leader in the development, manufacturing and sale of Engineered Response materials for the oil and gas industry. Terves' Engineered Response materials respond to their environment to "do something specific", such as dissolve, change dimensions, generate force or heat, destroy chemicals or bacteria, and/or other specific actions based on change in time, temperature, pressure and/or other triggering agents.

Terves is the leading manufacturer of dissolvable metals and polymers that are used for making frac balls, plugs, slips, seals and several other components used in oil and gas well completion and production; and have been used for completing tens of thousands of stages in North America, Europe, South America Asia and MENA regions. Terves' product portfolio also includes highly-engineered specialty proppants, expandable metals, acoustic imaging tools, thermites and structural reactive materials, net-shaped ceramic-metallic (cermet) nanocomposites, and high energy density supercapacitors. Terves is a strong research-based and product-focused organization that works with oil and gas majors, operators, EPC's and OEM's to commercialize existing products and develop new compelling products for some of the most critical challenges in oil and gas exploration, production and completion.

6. Terves has been directly targeted by a number of entities in China, via opposition proceedings (ultimately unsuccessful) against Terves' Chinese patents that are foreign counterparts to the '740 patent.
7. Terves has had to face down infringements of patents within the '740 patent family (including '740 itself), mostly sourced from China. As described in the POPR document, Terves recently won a jury trial against particular Chinese imports (judgment currently on appeal).
8. Before this proceeding, I had never heard of the petitioner. I would be aware if it had product in the U.S. market, and to my knowledge it does not. I have directed

investigations of United States import records, and my investigators tell me they have not found any evidence of United States imports from petitioner.

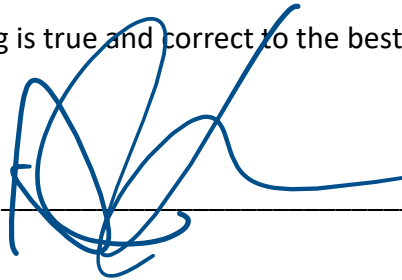
9. I learned from review of Professor Cohen's expert analysis that the petitioner's owner is a member of the Chinese Communist Party, that he is a professor at a Chinese government-funded university, and that this IPR is likely a "proxy litigation" by the Chinese government to "soften" my company as part of some sort of "lawfare."
10. Terves would be greatly disadvantaged by institution of trial, particularly in light of the repetitive kind of attack it represents over prior art we have already defeated, as discussed in the POPR.
11. We face a "double-whammy" problem from Chinese imports. The ITC's determination to extend antidumping duties means that we must pass along those duties (raw materials costs are therefore higher than internal Chinese prices) in our goods (making them more expensive and challenging our margins), whereas our Chinese competitors do not pass along such high duties in their goods, as the duties do not apply to secondary magnesium or fabricated products that compete with Terves. Because of this, Chinese finished goods may be sold at lower than our cost of goods sold. This threatens our ability to continue operations.
12. Having to deal with this IPR post-institution from a non-competitive non-market actor would drain critical management time and capital resources that we could otherwise use to survive in this challenging metals-sector marketplace, to expand

plant and diversify products, to employ domestic workers, and to support our
country's national interest.

I declare under penalty of perjury that the foregoing is true and correct to the best of my
knowledge and belief.

Dated: June 2, 2023

Signed: _____

A handwritten signature in blue ink is written over a horizontal line. The signature is stylized and appears to be a cursive or semi-cursive script. It starts with a large loop on the left, followed by several smaller loops and a long horizontal stroke extending to the right.