Suppes Case Study
IP OWNERSHIP

Dr. Galen J. Suppes, a professor in the Chemical Engineering Department of the University of Missouri received the EPA's highest honor in 2006 - The Presidential Green Chemistry Challenge Award - for his discovery of an environmentally-friendly use of the co-product of biodiesel production, glycerin. His process converts the excess glycerin into a "green" anti-freeze.

A frequent contributor to professional journals and oft cited author, he has been regularly recognized by the University of Missouri (MU) as an asset. Suppes' research has resulted in many awards and patents, but the University of Missouri has recently cried foul and accused its professor of not giving the college its due.

On the surface, the complaint of the Curators of the University of Missouri filed in Federal court, and subsequently in county court, appear significant. Dr. Suppes is accused of breaching his employment agreement, failing to comply with University rules and patent committee rulings, secreting patent and invention information and altering University documents. But as with many other university IP cases, such as the Townsend and Restasis cases, the foundational issues driving the litigation are much more complex.

But Dr. Suppes maintains his innocence and sees his predicament as an opportunity to advocate for the rights of Mizzou's faculty scientists dissatisfied with the school's handling of their intellectual property. Not only does he plan to continue his vigorous defense against the allegations of the University, but also plans a counter-suit to draw attention to the underlying issue of Missouri's ineffectual technology transfer office and its counter-productive practices.

DISPUTE OVERVIEW

Dr. Suppes has enjoyed a positive working relationship with the University of Missouri related to his teaching activities. But he has been at odds almost since he came to work for the University in late 2001 over its ownership and utilization of his intellectual property.

Mizzou has claimed ownership over several patents whose supporting research had been conducted and completed prior to his employment there. The University has also demanded assignment of one patent to them which Suppes has refused. The patent in question was based on four provisional patent applications all filed prior to his starting employment at MU.

From the professor's perspective, he initially hesitated to assign certain innovations to the University because of dissatisfaction with their efforts, or lack of efforts, to patent and commercialize his work. However, he eventually did assign rights despite his reservations. Additionally, Suppes is not the only faculty scientist with concerns about the technology transfer system of the University of Missouri.

Resolution

The Federal case filed against Dr. Suppes was dismissed citing lack of jurisdiction. However, the same day that case was set aside, attorneys for the University filed in the Boone County court system. Dr. Suppes is considering filing a counter-suit against Mizzou in the county court as well as fighting the charges against him.

This case study will be updated with the progress of the lawsuit and any results as they happen.

Innovation And Patent Details

INVENTION NAME
N/A

INSTITUTION
University of Missouri

NAME OF INVENTOR
Dr. Galen Suppes

REVENUE GENERATED
N/A

PATENT NUMBERS, DATES ISSUED, PATENT HOLDER'S NAME

PATENT 6,574,971: This invention is a method for producing phase change material (PCM) chemicals containing fatty acids or fatty-acid derivatives. These derivatives (1) are renewable, being produced by biomass or livestock such as cattle, (2) can be manufactured at low to moderate prices, and (3) can be manufactured in a variety of ways to produce PCM chemicals effective at several temperatures of interest in climate control and food maintenance. Unlike paraffin PCM chemicals that are largely limited to fractions available in either crude oil or irreversible chemical synthesis processes, the ester bond chemistry of triglycerides (fats and oils) is reversible allowing repeated reaction until the desired PCM chemicals combinations are synthesized and isolated. This method in a process based on contacting of reactants, reversible ester bond chemistry, separation of fractions with the desired latent heat properties, and recycle of those fractions that do not have the desired latent heat properties.

Provisional Dates: Provisional patent application dates - July 3, 2000, September 22, 2000, January 19, 2001 and March 28, 2001.
Filed: September 5, 2001
Inventor: Dr. Galen J. Suppes
Assignee: None
Commercial Name: N/A

PATENT 6,056,973: This invention is a composition of matter useful as a compression-ignition fuel. The composition has from about 30 to about 95 mass % of a light synthetic crude or syncrude, preferably from Fischer-Tropsch synthesis or related processes, and from about 5 to about 70 mass % of a blending stock that improves one or more desirable fuel property(s) including but not limited to pour point temperature, viscosity and emissions generated during combustion in a diesel engine. The blend stock preferably has an average molecular weight less than the average molecular weight of the light syncrude. Preferred blending stocks include hydrocarbons and oxygenates, such as alcohols, and ethers, having average molecular weights less than 200, preferably less than 160. The composition may optionally also contain pour point depressants, cetane improvers, carbon-containing compounds which react with water, and/or emulsifiers.

Filed: October 26, 1998
Inventor: Dr. Galen J. Suppes
Assignee: University of Kansas Center for Research
Commercial Name: N/A

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Innovation And Patent Details Continued

PATENT 5,468,839: A method of preparing a hydroxy-functional polyether comprising contacting (a) a hydroxy-functional polyether containing less than or equal to about 200 ppm of a Group IA or Group IIA metal ion, and (b) an acid. Preferably the contact is carried out under reaction conditions such that a salt, which is not suitable to significantly promote trimerization reactions if the hydroxy-functional polyether is reacted with an isocyanate compound, is formed. The amount of acid is sufficient to essentially neutralize residual basic catalyst without requiring additional solids removal steps prior to use of the hydroxy-functional polyether in various applications, such as production of polyurethanes and related products, in which enhanced trimerization may not be desirable. Additional acid may also be added to convert propenyl ether units present in the polyether's backbone to propionaldehyde and the corresponding diol.

Filed: June 22, 1993
Inventor: Dr. Galen J. Suppes, Dr. Hans R. Friedli
Assignee: The Dow Chemical Company
Commercial Name: N/A

PATENT 5,398,497: A method for burning slurry, liquid, or gaseous fuels at elevated pressures allows lower quality fuels to yield more energy and higher quality energy due to increased dew point temperatures in flue gases and high temperature heat exchange. The combination of elevated pressures and oxygen rich oxidant allows increased waste heat recovery, higher quality heat recovery, and substantially reduced air pollution. Turbochargers operated by flue gas and pressurized air, force the oxygen into the combustion chamber at increased pressures. Oxygen permeable membranes lower levels of nitrogen and reduce pollution by enhancing the stripping of pollutants from the flue gas and by the absolute reduction of flue gas exhaust. Latent heat recovery and water dilution of combustion mixtures are important aspects of the embodiments of this invention; both are enhanced by the vaporization of influent liquids while contacting influent gasses. High temperature heat exchange is facilitated by direct contact heat exchange means. Substantially reduced pollution levels allow operation in residential and downtown areas where cogenerated heat and coolant can be utilized. This method is particularly useful for converting garbage or sewage into electricity and for increased biomass combustion efficiency; however, advantages of this method can also be realized for most conventional fuels.

Filed: May 7, 1993
Inventor: Dr. Galen J. Suppes
Assignee: None
Commercial Name: N/A

PATENT APPLICATIONS: Suppes also has numerous current and abandoned patent applications, only some of which have been supported by the University of Missouri, although all have been assigned to it. Some were financed by the Mid-America Research and Development Foundation under a contract with the University of Missouri, less than half by the University and a fourth by Suppes himself, without benefit of reimbursement from the school.

Dispute Details

PRIMARY ISSUES ENCOUNTERED

As with every dispute, there are two opposing sides, as in this case, inventor and University. The University of Missouri, simply put, wants to own every innovation that Dr. Galen J. Suppes, a chemical engineer on staff there, develops. Seems straightforward enough and it would be if Suppes had confidence in how the University was stewarding his intellectual property.

Universities have specific concerns when it comes to commercializing research. Raising discretionary funds and monies for further research is a primary driver. However, good publicity from a home run innovation is also important for attracting and retaining top faculty scientists.

For the academic inventor himself, as in the case of Galen Suppes, profit is only one of many motivations for innovation. A main concern is patenting and commercializing research results in a manner to benefit society and allow him to continue and further his work. But also key to a professor is establishing their professional reputation to secure promotions and attract funds for ongoing research. But over the years he has been with Mizzou, Suppes experienced growing concerns over the management of his intellectual property by the University's technology transfer office. In order to build upon prior research, licensing deals must be carefully constructed so as to not preclude this action by the inventor or limit their ability to raise funds to continue their work.

For their part, the University of Missouri accused Dr. Suppes of submitting altered invention disclosure forms without notifying technology transfer personnel of the modifications; of not rightly assigning innovations to the University; of filing patent applications on research the University rightly owned. The University is also seeking a blanket assignment by the court of all of Suppes' innovations to them as well as damages, attorney fees and other costs incurred by Mizzou associated with the lawsuit.

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Suppes has not only said "not guilty" to these accusations but furthermore that he has been the victim of "incredible neglect" by the MU tech transfer program which he says is "totally broken and basically beyond repair." And Suppes is not the only faculty scientist at Mizzou with misgivings about the technology transfer process at their University. In the past two years, two faculty committees have recommended changes in how the University commercializes research. One of these groups recommended further review of several similar institutions, including the University of Alabama and Texas A&M with much less restrictive intellectual property policies.

Dispute Details Continued

Missouri also has a vocal critic in Dr. Jeffrey Phillips, inventor of Zegerid, a profitable acid reflux pharmaceutical. In 2008 Zegerid had sales exceeding $100,000,000, of which University of Missouri receives five percent, making him their biggest royalty earner. But according to Phillips, getting to this point has been "an atrocity" and that the technology transfer personnel at Mizzou are "really not very good at it."

He attributes the success of his invention not to the University, "but in spite of the University" and says he knows a number of fellow MU researchers who "never hear back from the University... who makes you jump through all these hoops and you can't even get the University to pay for a patent." Phillips says he has tried to help these burgeoning innovators, because "you feel sorry for these people because I've been in their situation."

Phillips says that once the ball was rolling, "Then they took it over. When there's a great success, the University is happy to step up and say 'We're all about tech transfer.'" Suppes saw similar apathy and then aggression from Missouri when, "They did nothing," he said "and the only time they showed interest is when I informed them that royalties had been paid. Then, the main thing they could focus on was to try to get the royalties and they still did not conduct due diligence in handling the technology."

Frustrated with inactivity from Missouri's tech transfer office, Phillips and Suppes instigated their respective patent and licensing processes themselves. According to Suppes, it is MU policy to "sit on inventions it has no intention of ever patenting and let the rights to the inventions lapse instead of returning them to the inventors."

This is the circumstance that has lead Suppes to admittedly alter the invention disclosure forms provided by the Technology Transfer Office before submitting inventions to the University. In addition to admitting that he changed the invention disclosure forms provided by the Technology Transfer Office, he clearly labeled the forms as having been altered. In the upper left corner, as the first word on the forms he submitted, is the word "Modified". The University claims that they were never notified that the forms were altered, but if all of the forms Suppes submitted were as clearly labeled as the sample he provided to IP Advocate, the modification is clearly evident.

On his modified form, he declined to grant a blanket assignment of rights to Mizzou and also stipulates that he will have the right to pursue patenting and licensing the innovation if the school didn't plan on patenting and acting on a discovery.

Also, an entire section of the proposal form was deleted. Section 15, Invention Disclosed to and Understood by a Witness, along with a space for the witness' signature were deleted. This deleted section was immediately prior to Section 16 - the area where Technology Transfer Office personnel are to sign verifying their review of the disclosure form.

A subsequent investigative review of the official disclosure forms held by the Technology Transfer Office revealed that Section 16 had not been signed. This was an indicator that either the office never reviewed the invention disclosure or neglected to review it in sufficient detail that they signed off on the review.

"Inventors at MU", Suppes says, "are held hostage by indifferent administrators and reams of red tape that crush faculty morale."

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Dispute Details Continued

As to issues that he acted without the University's knowledge in filing patent applications and pursuing licenses for his innovations, Suppes says he, "repeatedly tried to settle the differences through arbitration and then through the University's formal grievance process." He said he did assign inventions to them where appropriate and kept them apprised of all patent applications, whether the innovation was assigned to Missouri or not.

In one instance when Suppes did not assign rights to the University, he says "they made broad claims on the technology developed with a former graduate assistant" who had co-founded a company with Suppes that was funding research at the University which led to the invention. Suppes believes that the intellectual property that emerged from this should be jointly owned, but says the University has "tried to claim sole ownership" of the technology they developed to convert glycerol into an eco-friendly anti-freeze. Mizzou has advanced that the graduate teaching assistant's part-time employment with the Department of Chemistry is the overriding determiner that grants it sole ownership of the technology.

Dr. Suppes had hired Dr. Sutterlin, his co-defendant in the Mizzou filed lawsuit, to operate their company Renewable Alternatives, LLC (RA) and was paying Dr. Sutterlin a salary of $80,000 per year. RA funded University research on the glycerol technology. The University signed an Allocation of Rights agreement prior to the innovations that specifically allowed joint ownership between Missouri and RA. Dr. Sutterlin was recognized as one of three inventors of the innovation developed. In defiance of the executed agreement, the University demanded sole rights to the technology on the grounds that Dr. Sutterlin had been paid part-time to help teach a chemistry class, even though it was unrelated to the research efforts.

On two separate occasions, Suppes has requested resolution within the University's own processes, first to the Patent Committee and later to a Grievance Panel. The matter brought before the Patent Committee related to three patents issued to the researcher during his early years at Missouri. Two were simply modifications of patents that had been issued to Suppes prior to his employment there and the third was applied for within the first month of his employment, which resulted in a patent a year and a half into his tenure.

The University claimed ownership rights to all of these patents though the research that led to their issuance had all been done prior to Suppes coming to Missouri. Incredibly, Mizzou's Patent Committee decided that the two patent modifications were rightfully owned by the University and referred the third issue to outside counsel for resolution.

When Suppes appealed to the University's grievance system, it was after a number of e-mails, disclosure forms and other updates were offered to the technology transfer office and its attorneys. But, he says, the information he was providing to the "people at the bottom of the chain" did not make it up the ladder and "by the time it reached the decision-makers in administration, the information was nowhere close to the full truth. When I have asked to meet with the decision-makers to get the facts straight, they have refused time after time."

His frustration with Missouri failing to pursue commercial licensing for his research product and "obstructing him with onerous rules" led Suppes to file a grievance against several administrators in January of 2008. One of the roadblocks the technology transfer office utilized was a requirement that he obtain a million dollars of liability insurance, a constraint not required of private companies licensing technology from the University.

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Dispute Details Continued

UNIVERSITY INVOLVEMENT

Russell S. Jones Jr., an attorney representing the University of Missouri, wrote to Dr. Suppes that "your continued refusal to comply with the university's requests, its rules and the rulings of the university's Patent Committee has left (us) with no choice but to pursue its rights in court."

But with their internal process not yet exhausted and their researcher willing to work within Missouri's sytem, why circumvent the process and head to court?

Suppes says the University opting for the court system was "an effective way to terminate the grievance panel from making a recommendation" because, he adds, "the grievance results would be very embarrassing to the University and so one of the prospects of a lawsuit is that the primary objective is to try to bully me into submission."

And, despite being unsure of whether the courts would give him or Mizzou ownership of his intellectual property, Suppes assigned his inventor rights in all of his inventions to the school in November 2008, except the patent based on provisional patent applications dating over a year prior to his accepting the position at Mizzou.

So with the assignments executed, why did the University initiate a lawsuit? When the Federal court rejected Missouri's suit for lack of jurisdiction in April 2009, the University filed again in their local Boone County civil court. Why the doggedness in pursuit of a valued research scientist who had substantially caved in to their demands?

Every U.S. research university requires faculty inventors to disclose innovations. However, what is unique about the University of Missouri is that its disclosure form, by design, assigns all rights in the work to the school. If the invention is later determined to not meet requirements for Mizzou ownership, the faculty members must request the rights in their work to be given back to them.

Suppes says the University has "been sitting on the rights to his inventions" since he came to Missouri in 2001 and believes this is done "rather than risk turning over a profit generating technology" back to the inventor.

Gary Forsee, President of the University of Missouri, has even admitted that, "Our university has not done a great job in putting the processes and systems and resources in place... We are trying to cobble together some incremental funding so we can do tech transfer, which requires business case development and requires us to find how to take good ideas and get them some seed money."

With the passage of Bayh-Dole in 1980, research universities have now had nearly three decades to hone their technology transfer processes. Doesn't the acknowledgment of the shortcomings of Mizzou's technology transfer system by President Forsee seem to underscore the assertions of both Suppes and Phillips? And is it the same systemic flaws that are driving the lawsuit against its professor?

LEGAL FINDINGS/PROCEEDINGS

In the introduction of the lawsuit filed in Federal court, case number 2:2009cv04012, in January 2009, the University of Missouri states it is the "lawful and proper owner of inventions, patents and patent applications conceived and reduced to practice by Galen Suppes and William R. Sutterlin during and in the course of their employment with the University."

This statement clearly indicates that Mizzou lays claim to all intellectual property developed by Suppes since his employment began in 2001, regardless of the circumstance of an invention. While the Bayh-Dole Act does grant universities rights in innovations developed with Federal funds, none of Suppes work was conducted with public funds. But Missouri's parameters for ownership of faculty works are very broad, much broader than most research university policies.

Further into the complaint, the University charges Suppes with violating the entire patent act. Suppes' attorneys said in their motion to dismiss the suit that "this broad citation demonstrates that the plaintiff could find no support for its allegation because there is no section of the Patent Act which defines these terms or supports plaintiff's allegation."

In the same vague fashion, the complaint also alleges rights violated related to "various patent applications" that have been "abandoned, denied and/or licensed to third parties without any knowledge on the part of the University." What are the "various" patent applications alluded to?

A quick search of the patent database on the U.S. Patent Office's website generates a full list of patents issued to and patent applications filed by Suppes. With this very detailed information available to Mizzou and its attorneys, why is the reference in the complaint so ambiguous?

AWARDS/LEGAL RULINGS

April 20, 2009, the Federal court dismissed the University of Missouri's suit, supporting Suppes' attorney's motion that the court had no jurisdiction to decide the matter. The University must have been prepared for this advent since they filed a lawsuit nearly identical to the Federal case in the Boone County courts also on April 20th.

Because the University dismissed his internal complaint contemporaneous to filing the lawsuit, his grievance was never heard before the review board. For this reason, Suppes says he plans to serve Mizzou with a countersuit.

PERTINENT DOCUMENTS

Federal Complaint, Curators of the University of Missouri v. Suppes, et al.

Federal Dismissal, Curators of the University of Missouri v. Suppes, et al.

County Complaint, Curators of the University of Missouri v. Suppes, et al.

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Analysis

"What's been needed for a long, long time is someone to stand up to them. I happen to be the person who, finally it was worth it to me to stand up to them."

- Dr. Galen J. Suppes

"The lawsuit is a last resort to assure that the University's ownership of inventions made by University employees during their employment is protected. It is vitally important to secure for the people of the state of Missouri the full benefits of research done by the University of Missouri."

- Brian Foster, Provost, University of Missouri

IMPLICATIONS OF CASE

This case is of particular importance to the many faculty scientists of the University of Missouri, but also to all academic inventors across the nation who may find themselves in an unfortunate situation, similar to Dr. Suppes.

In the current economic climate, charitable donations to universities are down, costs are rising and the pressure is increasing on administrators to enhance the quality of education with ever diminishing resources. Perhaps though, this has turned up the pressure too much on the technology transfer office of the University of Missouri.

Should faculty scientists bear the burden of their university's financial woes? And should the fiscal stricture of a university give it carte blanche to preclude the intellectual property rights of its researchers?

In a recent State of the University address, President Forsee announced his intent to grow Mizzou's annual licensing revenue from its 2008 level of $6.4 million to $50 million by 2014. How does this ambitious goal, an increase of 781%, align with Forsee's other recent admissions that the technology transfer process of the Missouri system is seriously flawed?

The ultimate ramifications of this case will not be known until, one way or another, a verdict is rendered or one side surrenders. If Suppes prevails, faculty scientists can breathe a sigh of relief. If the University succeeds though, the lengths it went to in pursuit of its inventor may yet unnerve other researchers who are considering whether to come or go from the University of Missouri.

This case, like many other featured here, raise the fundamental question of whether a university has the right to force an employee to assign all inventions to the institution. This matter is particularly significant when assignment is demanded prior to due diligence to determine if the invention properly belongs to the inventor. Wouldn't logic dictate a determination of ownership prior to assignment? Taking the question a step further, can it be considered duress to require non-voluntary assignment of inventions?

FUTURE ACTIVITY ANTICIPATED

The Boone County courts will have to sift through the University's complaint to determine if it has any merit. Dr. Suppes' attorney, James Kernell, will file an answer to the complaint and that, in turn, will be evaluated by the county court. Additionally, Dr. Suppes plans to pursue a counter-suit against the University.

Updates to filings and responses will be posted to this case study as they are made available.

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