Táborský Case Study WASTEWATER TREATMENT



Petr Táborský was a student at the University of South Florida when he made a breakthrough in wastewater treatment. His discovery involved clinoptilolite, a clay-like substance commonly used in cat litter. Táborský found that by superheating the substance, its ability to absorb ammonium was greatly enhanced. This discovery had great potential in the treatment of wastewater.

Mr. Táborský's research came on the heels of a research project funded by the Florida Progress Corporation investigating different properties of clinoptilolite. The project ended as scheduled, with no results found. Subsequently, on his own time, and with the permission of Dr. Robert Carnahan, a Dean for Research at USF's College of Engineering, Táborský delved further into the possibilities of clinoptilolite. He eventually discovered the advantages of superheating clinoptilolite and received several patents related to this discovery.

DISPUTE OVERVIEW

At the time the controversy began, Petr Táborský was an undergraduate chemistry and biology student at the University of South Florida (USF), who had been hired as a student assistant in the research lab. He had been placed on a project sponsored by the Florida Progress Corporation, who had given the university \$20,000 to determine if bacteria could clean clinoptilolite so that it could be reused for wastewater treatment.

Dr. Robert Carnahan, a Dean of Research at USF's College of Engineering oversaw the research, but the project expired with no results found. After the three month long project had ended, Táborský asked Carnahan's permission to continue research on his own, hoping to use it as a thesis for his Master's degree.

Working independently with many sleepless nights spent at the lab, Táborský finally made a breakthrough which Carnahan disclosed to USF and Florida Progress. Both Florida Progress and USF claimed entitlement to his invention, the former offering Táborský a job as well as primary authorship on the patent they wanted to file. Táborský declined the job and told both parties he intended to patent his invention himself. Alarmed by threats of criminal prosecution by USF, Táborský packed up his research notes and fled the University.

USF filed criminal charges against him and Táborský eventually served time on a chain gang as a result of trying to protect his innovation. USF maintained that they had to seek maximum penalties against Táborský in order to alleviate any concerns corporate research sponsors might have. In addition to being jailed on criminal charges, his marriage crumbled, his U.S. citizenship application was put on hold and USF withheld his degree.



Resolution

This was a case, in the same vein as the Purdue/Badylak and UGA/Kaswan cases, where the university took aim at their inventor. In the Kaswan and Badylak cases, at least their respective universities pursued them in civil court and not all the way to jail.

Táborský was behind bars for a year and a half, four months of which were in a maximum security facility and two months of that on a chain gang. After his release in April 1997, Táborský continued to pursue the overturn of his conviction saying he will "settle for nothing less than complete and total vindication."

Now back in the Czech Republic, Petr Táborský has received his PhD and serves as a professor and researcher in the Department of Chemistry at Masaryk University.



Táborský found that by superheating clinoptilolite to 850°C, its ability to absorb ammonium was greatly enhanced. The Florida Progress project had a completely different focus and was not related to temperature variations.



INSTITUTION WHERE INVENTION/INNOVATION WAS DEVELOPED

University of South Florida

NAME OF INVENTOR/INNOVATOR - TITLE - ADVANCED DEGREES HELD

Dr. Petr Táborský, Ph.D.

REVENUE GENERATED

None

PATENT NUMBERS, DATES ISSUED, PATENT HOLDER'S NAME

PATENT 5,082,813: Aluminosilicates with modified cation affinity; mineral aluminosilicates enhanced as ion-exchange media for separating diverse ionic materials are provided by dry heating; a hydrated mineral alumino-silicate is irreversibly dehydrated in part, to improve the ratio of its affinity for preferred ions, relative to non-preferred ions, even though doing so reduces its affinity for both types of ions. Such dehydration is accomplished by heating the aluminosilicate until a temperature is reached at which its affinity for non-preferred cations is reduced enough that the ratio of its affinity for preferred ions to its affinity for non-preferred ions is greatly increased. Such aluminosilicates may be zeolites, such as clinoptilolite, or layered clays, such as vermiculite or smectite. 850 degrees C is an example of such temperature.

Filed: January 6, 1989 **Inventor:** Petr Táborský

PATENT 5,162,276: Preparation of modifying and using aluminosilicates; mineral aluminosilicates enhanced as ion-exchange media for separating diverse ionic materials are provided by

dry heating. A hydrated mineral alumino-silicate is irreversibly dehydrated in part, to improve the ratio of its affinity for preferred ions, relative to non-preferred ions, even though doing so reduces its affinity for both types of ions. Such dehydration is accomplished by heating the aluminosilicate until a temperature is reached at which its affinity for non-preferred cations is reduced enough that the ratio of its affinity for preferred ions to its affinity for non-preferred ions is greatly increased. Such aluminosilicates may be zeolites, such as clinoptilolite, or layered clays, such as vermiculite or smectite. 850 degrees C is an example of such temperature.

Filed: October 3, 1991 **Inventor:** Petr Táborský

PATENT 5,304,365: Treating wastewater with aluminosilicates with modified cation affinity; mineral aluminosilicates enhanced as ion-exchange media for separating diverse ionic materials are provided by dry heating. A hydrated mineral aluminosilicate is irreversibly dehydrated in part, to improve the ratio of its affinity for preferred ions, relative to non-preferred ions, even though doing so reduces its affinity for both types of ions. Such dehydration is accomplished by heating the aluminosilicate until a temperature is reached at which its affinity for non-preferred cations is reduced enough that the ratio of its affinity for preferred ions to its affinity for non-preferred ions is greatly increased. Such aluminosilicates may be zeolites, such as clinoptilolite, or layered clays, such as vermiculite or smectite.

Filed: July 2, 1992

Inventor: Petr Táborský





Dispute Details

Florida Progress, a utility company, had given a \$20,000 grant to USF under a three month contract to be billed on an hourly basis. The scope of the project was to find a way or determine if bacteria could clean clinoptilolite so that it could be reused in wastewater treatment. Dr. Robert Carnahan assigned Petr Táborský, a student assistant in his civil engineering laboratory, to the Florida Progress project as a lab assistant in 1987.

After three months, the project ended with no results and Dr. Carnahan closed the project down and sent Florida Progress a report. Florida Progress was billed \$20,000 although not all of the funds had been utilized. Accounting records of USF indicate that the remaining funds were diverted to Dr. Carnahan as a lump sum payroll disbursement.

Táborský planned his Master's thesis to be on the physical properties of clinoptilolite with Dr. Carnahan's approval. In May 1988, he submitted his first report on the subject. His research was unrelated to using bacteria to clean the clay or any other information from the Florida Progress project. Three months later, Táborský made a discovery that would have potential value to Florida Progress.

He had found that super-heating clinoptolite to over 800 degrees Celsius improved the clay substance's ability to clean wastewater. He was told that his results must be wrong because past 600 degrees, the heat would destroy the substance rather than enhance it, but subsequent testing by Táborský proved his thesis.

Dr. Carnahan told Táborský, "This could be worth millions", but that the student would have no rights in the invention, inaccurately informing him that USF was entitled to his work. Táborský, in turn, consulted a patent attorney, who agreed with him that as the discovery was outside of the Florida Progress boundaries it would belong to him. However, Táborský sought a resolution with Dr. Carnahan and the University. Dr. Carnahan escalated the issue, threatening his student with criminal prosecution. Dr. Carnahan next dangled the offer of employment with Florida Progress and co-authorship on the patent of Táborský's work.

Two months after his discovery, in September 1988, Táborský met with Florida Progress first to discuss his Master's thesis work and then later to discuss employment. In December they sent him an employment agreement that he declined on January 1, 1989. Five days later, he applied for a patent for his concept on patent application number 07/294,160 which resulted in the issuance of patent number 5,082,813 on January 21, 1992.

In January 1989, according to Táborský, Dr. Carnahan left several intimidating messages on his answering machine, demanding he turn over his laboratory notebooks to USF and threatening criminal prosecution. Táborský was, at this time, a Czechoslovakian immigrant, still in the process of gaining citizenship and was frightened by these threats. Based on pressure from his professor and the University, Táborský had taken all of his notes and notebooks and had fled the USF campus. So great was his distress that he did not even return to take his final exams.



Táborský's notebooks were at the heart of USF's case of theft. Carnahan gave a statement to police that Táborský took two notebooks out of a locked laboratory. In fact, as Táborský readily admitted, he had four notebooks that he had purchased and that he kept in his possession both on and off campus. The pages of his notebooks that contained details of his work on the Florida Progress project were already in the University's possession. The only materials he kept were those relating to his unique research related to his Master's thesis. Those pages described his innovation, an innovation that Carnahan and USF knew was valuable, and one they seemed determined to possess. They pursued their student all the way to prison, and eventually even onto a chain gang.

Táborský had never been asked to sign a confidentiality agreement or any type of employment agreement that would have given USF any rights in his work. Additionally, USF had no written policy at that time regarding the University's rights in any student invention. Táborský did eventually sign a confidentiality agreement with Florida Progress as part of his consideration of employment but this was much after the fact of his discovery.

UNIVERSITY INVOLVEMENT

Subsequent to Táborský's filing his patent application, Dr. Carnahan swore in a criminal affidavit that Táborský had stolen over 32 trade secrets from the University of South Florida. In September 1989, eight months after Táborský's patent application was filed, Dr. Carnahan, on behalf of the University of South Florida and Florida Progress, filed his own patent application, claiming Táborský's invention as his own. The University then appealed to the U.S. Patent Office to request interference with Táborský's application and advised them that they had filed criminal charges against the inventor.

In Petr Táborský's criminal trial, prosecutors told the jury that Táborský had invented nothing and was merely assisting Dr. Carnahan in his research. One of the prosecutors in the case said to the jury, "The only thing Petr Táborský invented is the story he told you." However, the U.S. Patent Office sided with Táborský and awarded him the patent on the invention and dismissed Carnahan's application. The USPTO found that Carnahan's patent application was baseless and reflected no knowledge of the details or workings of the innovation.

In early 1990, Táborský was convicted of second degree grand theft and theft of trade secrets. However, USF witnesses presented testimony and documents during the trial that have since been refuted through civil discovery and by advocates of Táborský. USF's claims of inventorship were completely refuted by the Patent Office's determination that Petr Táborský was the sole inventor of the invention in question.



Dispute Details Continued

Additionally, the Florida Progress confidentiality agreement signed by Dr. Carnahan is questionable. The form itself was revised by the company in September 1988, yet Carnahan listed a date of July 1988 beside his signature. How could he have signed a form three months prior to its creation? Oddly, he also failed to include any indication of the specific day in July. Further, the USF Police Department did not find this form during their investigation conducted in late 1989.

Based on the dubious confidentiality document, questionable handling of project funds and erroneous claims that he had discovered Táborský's innovation, Carnahan would have been a witness with little credibility. But USF managed to keep these issues hidden from the jury. The USF police report was also withheld from the trial, as was USF's own Policy Manual, which would have revealed that they were bound to protect Táborský and his intellectual property, which they were clearly not.

Táborský was sentenced to one year of house arrest plus 15 years probation and was ordered to turn over all of his research materials to the University of South Florida. He did relinquish his notebooks as required.



Whatever motivated the University of South Florida to pursue criminal charges against their student, it was certainly excessive. In a letter, then University of South Florida President Francis Borkowski encouraged the judge to sentence Táborský to jail time, stating that "the sad fact is he is beyond rehabilitation" and that his actions threatened the good relationship USF enjoyed with its corporate sponsors.

It is not clear whether the University initiated criminal proceedings to reassure their corporate sponsors, intimidate Táborský or to bolster the interference case USF had filed with the U.S. Patent Office, but it was certainly excessive, no matter the motivation. Even subsequent USF General Counsel Henry Lavendera agreed the University's actions were extreme saying, "I would have made an attempt to resolve the dispute short of going to a criminal process. The university could have asked a civil-court judge for an injunction preventing Táborský from patenting the process."



LEGAL FILINGS/PROCEEDINGS

Board of Regents of the State of Florida v. Petr Táborský

Petr Táborský v. State of Florida

AWARDS/LEGAL RULINGS

Petr Táborský was convicted by a jury of second degree grand theft and theft of trade secrets. He was sentenced initially to one year house arrest, 15 years of probation and told to "keep his nose clean".

After Táborský was awarded three patents by the U.S. Patent Office and the Carnahan/USF patent was rejected, the University filed additional criminal charges, contending he was violating his probation by pursuing his ownership rights.

The judge told him to sign over his first patent to USF within ten days or go to jail. Táborský refused and was sentenced to three and a half years in prison. After losing appeals, he began serving his sentence in 1995. In what was quite unusual for white collar crime, Táborský was placed on a chain gang, a punishment usually meted out only to the most dangerous criminals.



Analysis

"When you think about going to jail, it's so terrifying I couldn't get out of bed in the morning. But at some point I made the decision I wasn't going to let them use the criminal court to get something they weren't entitled to."

- Petr Táborský

IMPLICATIONS OF CASE

Chicago Tribune staff writer Ron Grossman summed the case up aptly in a 1997 article saying the verdict "makes him the first person ever imprisoned for stealing something that the U.S. government says he invented."

When called upon by the State of Florida's General Counsel Dexter Douglass to justify their spending over \$330,000 in legal fees for private attorneys related to the Táborský case, the University began to back pedal on its previous actions. Douglass said, "We are concerned that the government overreached in this young man's case." The University spent hundreds of thousands of dollars and went to great lengths to reassure their corporate sponsors of their ability to protect project results, all under the auspices of USF's President Francis Borkowski.

In his first days in office, Borkowski spoke to press and faculty about his goals while in office. He pushed for faculty to "aggressively pursue research money" and said that faculty members who did not engage in research have lost interest in their discipline and "can hardly be interested in teaching." Borkowski promised to build USF into one of the top 25 public research universities in the country over the next decade. Perhaps the pressure of living up to these goals was one of the motivations to pursue the Táborský case with such intensity.

FUTURE ACTIVITY ANTICIPATED

After his release in April 1997, Táborský continued to pursue the overturn of his conviction saying he will "settle for nothing less than complete and total vindication."

Petr Táborský is now back in the Czech Republic, has received his PhD, and serves as a professor and researcher in the Department of Chemistry at Masaryk University. He writes and publishes prolifically.

USF President Francis Borkowski did not make it to his projected 2001 retirement date. He was released from USF for his conduct in connection with the cover-up of multiple campus rapes by an athlete, saying it was a "lover's quarrel". While serving as Chancellor of Appalachian State University, Borkowski incited protests by his unsympathetic response to a series of rapes on that campus as well.

Dr. Carnahan is still at USF. He was never awarded any patents related to Táborský's research.

