

Tips for Enforcement of University Patent Portfolios



Don Prather, PhD, JD
Partner, Life Sciences
Meunier Carlin & Curfman

Warren Thomas, JD
Partner, Litigation
Meunier Carlin & Curfman



MEUNIER CARLIN & CURFMAN

University Litigation and Enforcement Cases

- Summary of Patent Litigation and Enforcement Cases Covered
 - Litigation Funding (University of California, Santa Barbara)
 - Sovereign Immunity (Univ. of Texas, Univ. of Minnesota)
 - Inventorship (Dana Farber Cancer Institution)
 - Assignment Issues (University of Michigan)
 - Patent Pools (15 Universities and the UTLP)
 - Patent Interference Disputes (University of California, Berkeley and the Broad Institute)



Covid-19 and Budget Pressures for Technology Transfer Offices

- 84% of Technology Transfer Offices do not make enough money to cover their operating costs (2013 Brookings Institute).
- In addition, the Covid-19 pandemic severely affected the budgets of many universities as less students were enrolled, and the operations of universities were severely impacted by the pandemic.
- Thus, there is additional pressure on universities, and technology transfer offices, to generate revenue to off-set budget reductions.
- Previous litigation involving universities have led to large damages awarded (Carnegie Mellon University; Jury = \$1.5 billion; Settled = \$750 million)



UC Santa Barbara campaign

- In 2019 UCSB partnered with litigation funder Longford Capital to fund UCSB's enforcement campaign related to filament LED technology (2019 sales \$1B+)
 - UCSB points to Longford's involvement to make it "possible ... to assert its intellectual property rights without spending university resources on litigation"
- Initial phase involved suits in district courts and ITC complaint against retailers for infringement of 4 patents
- Scope of campaign has expanded to include assertions of additional patents against other retailers, suppliers, and manufacturers, including a second ITC complaint and PTAB challenges to the asserted patents
- Almost 28 "industry partners" identified publicly as licensees



State Sovereign Immunity

- States typically enjoy immunity from lawsuits brought by private parties as a “fundamental aspect of the sovereignty which the States enjoyed before the ratification of the Constitution, and which they retain today.” *Alden v. Maine*, 527 U.S. 706, 713 (1999)
- “The preeminent purpose of state sovereign immunity is to **accord States the dignity that is consistent with their status as sovereign entities,**” while collaterally “serv[ing] the important function of shielding state treasuries.” *Fed. Mar. Comm’n v. S.C. State Ports Auth.*, 535 U.S. 743, 760, 765 (2002).



Sovereign Immunity does not override venue

Bd. of Regents of the Univ. of Texas Sys. v. Boston Scientific Corp., 936 F.3d 1365, 1374 (Fed. Cir. 2019)

- University of Texas (UT) and its exclusive licensee TissueGen sued Boston Scientific in Western District of Texas over infringing stent products
- UT used its sovereign immunity as a “hook” for venue in Texas
 - “it would offend the dignity of the State to require [UT] to pursue persons who have harmed the State outside the territory of Texas, and the State of Texas cannot be compelled to respond to any counterclaims, whether compulsory or not, outside its territory due to the Eleventh Amendment” (Complaint ¶ 10)
- District Court granted BSC’s motion to transfer; Federal Circuit affirmed
- **Holding:** “sovereign immunity cannot be asserted to challenge a venue transfer in a patent infringement case where a State acts solely as a plaintiff” (*id.* at 1377)



So long, sovereign immunity at the PTAB...

Regents of the University of Minnesota v. LSI Corp., 926 F.3d 1327 (Fed. Cir. 2019), *cert. denied*, 140 S. Ct. 908 (2020)

- University of Minnesota sued LSI Corp. (and others) for infringement of patents related to semiconductors; LSI countered by filing IPRs at PTAB
- Minnesota asked PTAB to dismiss based on state sovereign immunity
 - PTAB agreed that sovereign immunity applied but Minn. waived it by filing the infringement suits.
- Federal Circuit affirmed the PTAB (allowing IPR to proceed), holding **state sovereign immunity does *not* apply** to IPR proceedings



Sovereign Immunity: When you don't want to join the party?

Gensetix, Inc. v. Bd. of Regents of Univ. of Texas Sys., 966 F.3d 1316 (Fed. Cir. 2020)

- Named inventor Decker was employed by UT's MD Anderson Cancer Center. Decker (et al.) invented methods for modifying patients' immune system to kill cancer. Decker later moves to Baylor College of Medicine
- Gensetix eventually becomes exclusive licensee
- Gensetix sues Baylor and Decker (and another involved party) and names UT as an "involuntary plaintiff" under Federal Rule of Civil Procedure 19(a)
- UT moves to dismiss citing sovereign immunity; Baylor moves to dismiss under Rule 19(b) because UT is necessary to proceed



Sovereign Immunity: When you don't want to join the party? (*cont'd*)

Gensetix, Inc. v. Bd. of Regents of Univ. of Texas Sys., 966 F.3d 1316 (Fed. Cir. 2020)

- So what is Rule 19? Provides for *required* joinder of parties
 - **19(a)** tells the court when a party is required to join (e.g. a patent owner is ordinarily required) and when a court can *order* a party to join—when feasible
 - **19(b)** tells the court what factors govern whether the case should continue or be dismissed when a required party *cannot* feasibly be joined (“equity and good conscience”)
- Not disputed on appeal that UT was required under 19(a), but it argued sovereign immunity made it *infeasible* to join



Sovereign Immunity: When you don't want to join the party? (*cont'd*)

Gensetix, Inc. v. Bd. of Regents of Univ. of Texas Sys., 966 F.3d 1316 (Fed. Cir. 2020)

- Panel Majority ruled sovereign immunity barred joinder under Rule 19(a)(2)
 - “The Eleventh Amendment serves to prevent ‘the indignity of subjecting a State to the coercive process of judicial tribunals’ against its will.” (quoting *Seminole Tribe of Fla. v. Fla.*, 517 U.S. 44, 58 (1996))
 - Not just suits *against* the state; court can't order UT to join as involuntary plaintiff, either



Sovereign Immunity: When you don't want to join the party? (*cont'd*)

- But *different* majority said the suit could proceed *without* UT because the license was field limited

Judge Newman	Judge O'Malley	Judge Taranto
Not Immune	Immune	Immune
Should Proceed Even if Immune	Should Proceed Even if Immune	Should Not Proceed if Immune

Source: *Patently-O*, patentlyo.com
10-20-2020

- District Court had basically collapsed the multi-factor analysis into “UT is sovereign so we can’t go forward,” and that was error
- A key fact for Court was that Gensetix’s license was to every field of use, which leads to conclusion that the *interests of licensee and licensor are “identical”* such that Gensetix could fully step into UT’s shoes to protect UT’s interest in the patents
- **Lesson?** Would a field of use limitation have done the trick?



Inventorship Review

- 35 U.S.C. § 116: “When an invention is made by two or more persons jointly, they shall apply for a patent jointly.”
- Joint invention is “the product of a collaboration between two or more persons working together to solve the problem addressed.”
- Joint Inventors **do not need to:**
 - Physically work together
 - Work at the same time
 - Make the same type or amount of contribution
 - Contribute to every claim
- There’s no “minimum quality or quantity of contribution required for joint inventorship.”

Burroughs Wellcome Co. v. Barr Lab’ys, Inc., 40 F.3d 1223, 1227 (Fed. Cir. 1994)



Inventorship Review

- Invention = conception + reduction to practice
- Conception is “the touchstone of inventorship” — “the formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice.” *Burroughs*, 40 F.3d at 1227–28
- Joint inventors **do need to**:
 1. contribute in some significant manner to the **conception or reduction to practice** of the invention,
 2. make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention, *and*
 3. do more than merely explain to the real inventors well-known concepts and/or the current state of the art.

Pannu v. Iolab Corp., 155 F.3d 1344, 1351 (Fed. Cir. 1998)



Adding Joint Inventors: *Dana-Farber*

Dana-Farber Cancer Institute, Inc. v. Ono Pharmaceutical Co., 964 F.3d 1365 (Fed. Cir. 2020), *cert. denied*, 141 S. Ct. 2691 (2021)

- Dana-Farber filed suit under § 256 to correct inventorship on 6 patents assigned to Ono Pharmaceutical, relating to groundbreaking work in cancer immunotherapy treatments
- Patents originally filed in the name of Dr. Honjo of Kyoto University medical school and some of his Japanese collaborators
- But Dana-Farber alleged Dr. Freeman (researcher at Dana-Farber) and Dr. Wood (of Genetics Institute) had collaborated with Honjo
 - Dr. Honjo “credited Dr. Freeman as a major collaborator in his work” during his Nobel Prize acceptance speech



Ono's arguments and Court's analysis

- Ono: Freeman's and Wood's contributions were "too far removed" from the subject matter, relied on public information,
 - Court: joint inventors don't need to contribute to all aspects, so fact they weren't present for or participated in all the experiments didn't "negate their overall contributions"
- Ono: Early work (before the October 2000 data from Hanjo's group) was "too speculative"
 - Court: Conception is the touchstone of invention, and Dr. Iwai's work providing *in vivo data* and verification of the *idea* was not required for the conception to be "definite and permanent". Verification is part of reduction to practice.
- Ono: Honjo patents were "issued over" the Freeman/Wood 1999 provisional application
 - Court: "joint inventorship does not depend on whether a claimed invention is novel or nonobvious over a particular researcher's contribution"
- Ono: Freeman's publication (*i.e.* putting into the prior art) cannot qualify as "significant contribution to conception of the total invention"
 - Court: That categorical rule that would "ignore the realities of collaboration," which generally spans a period of time and may involve multiple contributions



Omni MedSci, Inc. v. Apple Inc.: Litigation over Assignment Language

- Take home practice pointer:
 - Use present tense language in assignments and in other university documents regarding the obligation of university faculty to assign intellectual property to the university
 - Do not use the language “shall be the property of” in assignments and university bylaws
- Omni MedSci, Inc. v. Apple Inc. Nos. 20-1715 (Fed. Cir. Aug. 2, 2021)
 - 2-1 Federal Circuit panel decision



Omni MedSci, Inc. v. Apple Inc.: Litigation over Assignment Language

- University of Michigan inventor had taken leave of absence and had assigned his patent rights to Omni MedSci
- The university asserted it should be the owner of the patents the inventor had assigned to Omni MedSci
- Omni MedSci brought a patent infringement suit against Apple regarding several health sensor patents
- Apple asserted that Omni MedSci did not have standing because the patent rights were automatically assigned from the inventor to the University of Michigan



Omni MedSci, Inc. v. Apple Inc.:

Assignment Lessons from *Stanford v. Roche*

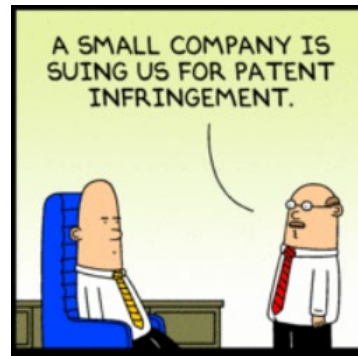
- Supreme Court: *Stanford University v. Roche Molecular Systems, Inc.*, 563 U.S. 776 (2011)
- The justices affirmed the common understanding of U.S. constitutional law that inventors originally own inventions they make, and contractual obligations to assign those rights to third parties are secondary
- The court held that the language "agree to assign" in the agreement that Stanford had the inventor sign was merely a promise to assign his invention rights to Stanford at some undetermined future point.
- In contrast, the language in the assignment from the inventor to the company used the language: "will assign and does hereby assign"



Omni MedSci, Inc. v. Apple Inc.:

More Bad Assignment Language

- Omni MedSci argued that assignment language in the university bylaws was an agreement to assign in the future, not a present assignment:
 - “Patents and copyrights issued or acquired as a result of or in connection with administration, research, or other educational activities conducted by members of the University staff and supported directly or indirectly (e.g., through the use of University resources or facilities) by funds administered by the University regardless of the source of such funds, and all royalties or other revenues derived therefrom *shall be the property of the University.*”
- Language from the Invention Disclosure
 - “I/we hereby assign our rights...”
- Court held the language in the bylaws did not create an automatic assignment



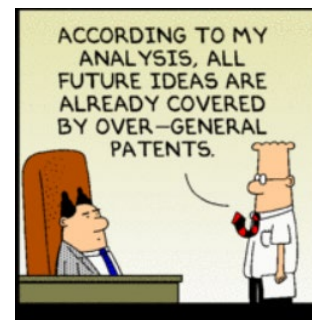
Omni MedSci, Inc. v. Apple Inc.:

Assignment Language

- Practice pointers to avoid litigation over assignments
 - Use the Magic Language from various court decisions
 - Good Language for Present Automatic Assignment

“the Employee assigns”; “agrees to and does hereby grant and assign”; “hereby conveys, transfers, and assigns”; “agrees to grant and does hereby grant”; “will assign and does hereby assign”
 - Bad Language for Future Assignment

“shall be the property of”; “will assign”; “agree to assign”
 - Review assignment language and Invention Disclosure Forms
 - Review employment agreement language in university documents (employee contracts and university bylaws)



Omni MedSci, Inc. v. Apple Inc.:

Assignment Language

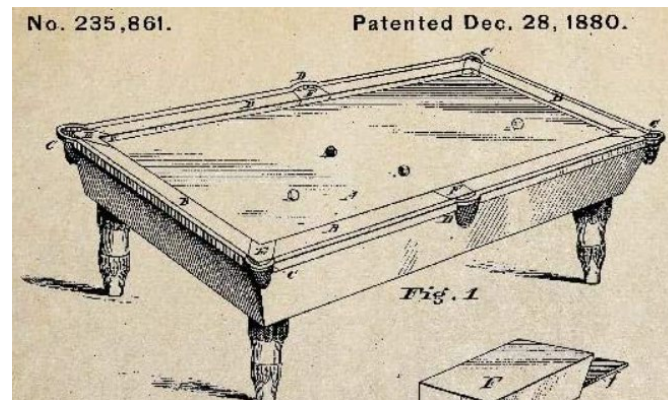
- Next Steps in the Omni MedSci v. Apple case
- Apple filed a petition to the Federal Circuit for Rehearing *en banc*
- Petition denied November 18, 2021
- AUTM Amicus Brief
 - Supports Apple and asserts that the language “shall be the property of” is sufficient language to provide an obligation of assignment from the faculty inventor to the university



Patent Enforcement and Patent Pools

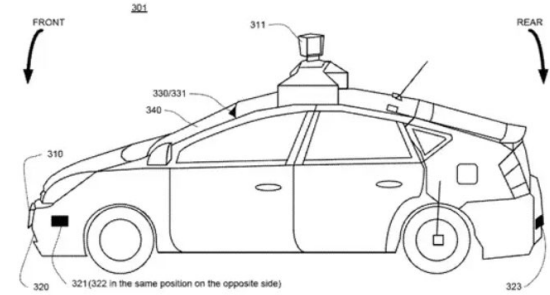
- January 2021 – Formation of the University Technology Licensing Program (UTLP)
- Provide an efficient way to disseminate and license patents
- 15 Universities:

Brown University; Caltech; Columbia University; Cornell University; Harvard University; Northwestern University; Princeton University; State University of New York at Binghamton; University of California, Berkeley; University of California, Los Angeles; University of Illinois; University of Michigan ; University of Pennsylvania; University of Southern California; Yale University



University Technology Licensing Program (UTLP)

- Technology Areas
 - Autonomous Vehicles
 - Connectivity (Internet of Things)
 - Power management, signal processing, location tracking, cameras and image processing)
 - Data Applications (Big Data)
 - Storage, data management, network protocols
- Future Technology Areas
 - Semiconductor fabrication, applied electronics, batteries, photovoltaics, robotics, and other areas



University Technology Licensing Program (UTLP)

- Non-exclusive licenses
- Can license bundle or individual patents
- License costs depend on number of patents, technology buckets licensed
- Enforcement via license negotiations
- Contingency fee litigation
- Litigation funding



University Technology Licensing Program (UTLP)

- Cons:
 - Antitrust concerns – DOJ agreed in January that it won't challenge the LLC licensing program on antitrust grounds
 - Potential negative publicity
 - Administrative burden - Time investment from the university
 - Some costs to provide voluntary financial contributions to cover litigation expenses
 - Potential for low revenue (given the mixed performance record of previous patent pools)



University Technology Licensing Program (UTLP)

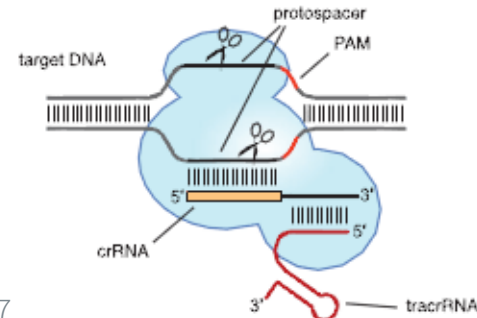
- Pros:
 - License patents that would otherwise be abandoned
 - Recover sunk patent costs
 - Collaborate with other leading universities
 - Expand relationship with industry members in specific technology areas
 - Financial upside to receive some revenue (even if no patents get licensed from a particular university)



Patent Interferences Between Universities: CRISPR

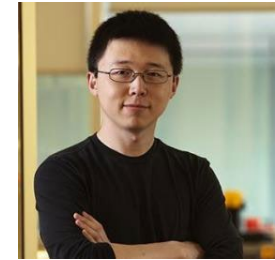
- Overview of the CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) interference proceeding
- University of California, Berkeley vs. the Broad Institute
- Chemistry Nobel prize awarded in 2020 to Jennifer Doudna (UC Berkeley) and Emmanuelle Charpentier for their discovery of the CRISPR gene-editing technique.

Cas9 programmed by crRNA:tracrRNA duplex



CRISPR Interference: Timeline

- May 25, 2012
 - First provisional patent application filed by Jennifer Doudna (UC Berkeley), Univ. Vienna, and Emmanuelle Charpentier
- June 28, 2012
 - Doudna's Science paper on CRISPR published
- December 12, 2012
 - Feng Zhang, Broad Institute: First provisional patent application filed
- January 3, 2013
 - Zhang Science paper online – showing CRISPR worked in eukaryotic cells
- January 28, 2013
 - Follow on Provisional Application from UC Berkeley



CRISPR Interference: Broad Institute

- October 5, 2012: Manuscript submitted to Science
- December 12, 2012: Provisional application filed
- Oct. 15, 2013: Non-provisional filed
 - Petition for accelerated examination
- February 20, 2014: Notice of allowance
- April 15, 2014: First Broad Institute patent issued
- June 19, 2018: First UC Berkeley patent issued



CRISPR Interferences

- Initial CRISPR Interference between UC Berkeley and the Broad Institute
 - PTAB concluded no interference-in-fact (2017)
 - Federal Circuit confirmed PTAB conclusion (2018)
- Second Interference on an additional patent application with claims to the use of CRISPR in eukaryotes
 - PTAB concluded that Broad was entitled to senior party status (Sep. 2020)
 - Ongoing dispute to show who conceived of the invention first



CRISPR in Europe: More assignment issues

- Europe – Patent EP2800811 issued on May 10, 2017 to UC Berkeley
 - UC Berkeley initial patent includes plants, animals, and human cells (eukaryotic cells)
- Broad Institute – Assignment Issues
 - One of the inventors did not have an obligation to assign to the Broad Institute
 - But the patent application in Europe was filed with the Applicant as the Broad Institute
- Practice Pointer on Assignments
 - Obtain assignments from all inventors as soon as possible and ensure they are assigning to the correct entities



CRISPR Interference: Practice Pointers for Protecting High Value Technologies

- First to File System - for important technologies - file early, file often
- Accelerate high value patent applications or where litigation is expected
- Patent pools
 - To combine technologies with other universities to simplify licensing from multiple parties to multiple companies
- Patent drafting
 - Have inventors think broadly about the applications of the technology
 - File follow up provisional applications for important technologies
- Assignment issues
 - Europe – Get assignments and applicants correct



University Litigation and Enforcement Cases

- Summary of Patent Litigation and Enforcement Cases Covered
 - Litigation Funding (University of California, Santa Barbara)
 - Sovereign Immunity (Univ. of Texas, Univ. of Minnesota)
 - Inventorship (Dana Farber Cancer Institution)
 - Assignment Issues (University of Michigan)
 - Patent Pools (15 Universities and the UTLP)
 - Patent Interference Disputes (University of California, Berkeley and the Broad Institute)



University Litigation and Enforcement Cases

- Practical Tips for Technology Transfer Offices from Recent University Litigation
 - Litigation funders can help finance the enforcement and monetization of your patent portfolio
 - Sovereign immunity is a shield, not a sword
 - Deal with inventorship issues early and consider collaborators' contributions
 - Review assignment language in assignments and other university documents, such as university bylaws
 - Consider patent pools with other universities for licensing and enforcing your patent portfolios
 - For high value technologies - file early, file often; complete assignments in a timely fashion and consider patent pools for reducing risks and reaching a settlement



Questions?

Don Prather
dprather@mcciplaw.com

Warren Thomas
wthomas@mcciplaw.com





autm

Transforming Ideas into Opportunities