

Texas Intellectual Property Law Journal
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RAINMAKERS FOR THE HARVEST OF TECHNOLOGY^{da}
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Austin, the capitol of this state, is named after the man Sam Houston called "the father of Texas," Stephen F. Austin. As Texans, Austinites proudly embrace the myths and legends of Texas' rugged frontier days. But while we are heirs to the spirit of the frontier, Austin is also the intellectual center of Texas and the home of the University of Texas. Although Austin is a city of less than 500,000, you might be interested to know that this city ranks 16th in the country in achieving patents. Other Texas cities are also highly ranked. To me, this suggests this state is approaching critical mass as a high technology center. The three largest industries in Austin -- state government, universities, and the electronics industry -- give this city, even more than others in our state, a research base and an intellectual base. For that reason, I believe Austin, Texas, provides a most appropriate setting for this important conference and for the distinguished members of this association.

When asked to speak at your conference, I was eager to do so. While my background as a prosecutor and member of the Texas Legislature is, I would conjecture, somewhat in contrast to the professional experience of many of the participants of this conference, intellectual property law is a key issue in the Office of the Attorney General. As Attorney for the State of Texas, my office has to litigate intellectual property lawsuits for state agencies and state universities. I quickly discovered after assuming office that the Attorney General's office, with more than 500 attorneys, had little expertise in this field. We have expanded our staff with some capable attorneys qualified in this area of law. But as we all know, the demand for intellectual property lawyers continues to grow in both the public and the private sectors.

When one examines the economic history, and the mythology, of Texas, most of it revolves around three products: cotton, cattle, and oil. However only cattle, and the cowboys that herded them northward for a decade or so, were ever really free from technological imperatives. The economics of cotton production were transformed by the invention of the cotton gin. And while the era of the cowboys and their cattle drives was not launched by technological advances, the era was certainly ended by them. The advent of barbed wire, coupled with the coming of the railroads, put cowboys out to pasture.

For generations to come, Texas mythology will remain linked to oil derricks and wildcatters. Spindletop, the legendary 1906 gusher in East Texas, served as the harbinger of an oil boom that lasted the better part of a century, indeed that helped make the 20th Century a Texas Century. The industries and the wealth created by oil and natural gas, fueled our demographic transition from rural to urban, and provided our UT system with an endowment second only to Harvard among American universities. Without oil and gas, it is doubtful that Texas ever would have become a magnet for dramatic job and population growth, doubtful that we would have built gleaming new cities on our prairies. Yet Spindletop would never have mattered very much without Henry Ford's breakthroughs in mass production. Without assembly line technology to make automobiles affordable, what good would our petroleum reserves have been? History teaches us that the value of natural resources is transformed by technology, and that we are the rich heirs of such transformations. The enduring resource in Texas, long after cotton, cattle, and oil have passed, will be human intelligence.

*2 In Texas, we pride ourselves on a can-do entrepreneurial spirit that comes from our heritage of self-reliance as a frontier people. Yet that spirit is the soul-mate of Yankee Ingenuity. It is a national, not a regional trait. Americans are a people self-selected to prefer experimentation, opportunity, and adventure over tradition and predictability. Our most important, most enduring natural resource is our people, and the educational institutions that foster their development and productivity. The only resources that can ensure that the 21st Century is an American Century, as have been the two centuries preceding it, are the mental resources of our educated population, brought to full fruition. And a careful look back at our history shows that it has always been so.

U.S. economic history has been punctuated by cycles of explosive economic growth, what some economists call transformational growth. In such periods, new technologies dramatically reshape the economic landscape. The industrial revolution, beginning with James Watt's steam engine, and the building of the railroads across the American West in the 1880's, are vivid examples. The Roaring 20's roared because of the automobile. Baby boomers grew up under the prosperous wings of the aeronautics industry, as the jet plane boosted tourism into the largest industry in the world today. All Americans are now familiar with the revolutions wrought by the computer and micro-electronics. While these industries continue to be a staple here in Austin, in other Texas cities, and all across the United States, their economic impetus no longer promises to

transform the American standard of living.

So we come to the challenge that fuels this conference, which links advancements and new insights in the field of intellectual property law to the most vital human enterprise. Your expertise lies not in the field of status quo preservation, nor of incremental progress. Your efforts and expertise must help guide us to the next period of transformational economic growth. You must guide intellectual expeditions across new frontiers. You must counsel those who seek the next holy grail of every market economy -- the scientific and technological breakthroughs that will fuel prosperity into the 21st Century. Whatever opens the gates to our next economic boom -- genetic engineering, space technology, ceramics, atomic physics -- you will be there as the gatekeepers. For between the idea and the reality, between the first tentative experiments and the polished end product, there exists a treacherous course that cannot be navigated without your guidance.

The question of the day focuses on technology transfer, the process of taking promising experimental research and converting it into jobs and wealth. How do we transform the embryonic ideas of science into financing for factories, and the marketing of products? And for every start-up company, for every late-20th Century Thomas Edison or Henry Ford, how can we generate dependable access to capital? These journeys are as full of peril as those taken a century ago by westward bound pioneers. Cooperation was the key to crossing that geographic frontier 100 years ago. So it is today. New alliances between business, government and universities have been, and will continue to be, the key to our nation's future prosperity. However, no one suggests the process has been smooth or even timely. Too often, we have suffered from a technology transfer gap. As one fellow put it succinctly: "we're the starters and the Japanese are the finishers."

If we want technological innovation to stay within a company or a country, we must improve our ability to form cooperative teams among those who invent, those who apply, and those who finance and commercialize. To develop common understandings of technology, common vocabularies, and realistic assessments of marketability can be a daunting task as product life cycles are compressed. The irony is that as technology has become more important, building a competitive advantage based on technology has become more difficult. Whatever the difficulties, there is growing recognition that the next technological wave, the next era of transformational economic growth, cannot even begin without the essential due diligence you provide. Your knowledge and insights as intellectual property lawyers have moved you from the periphery of senior management to the inner circles.

***3** We have all seen how the creation of the Court of Appeals for the Federal Circuit has helped launch a new era in patent law. Prior to 1982 when the court was created, almost three quarters of patents litigated were held invalid. In the six years after its creation, 81 percent of patents were upheld. Today we realize that patents are not anti-competitive, but pro-competitive instruments of law.

This is undoubtedly the most exciting, and the most demanding era in the history of intellectual property law. From 1870 to 1970, U.S. technology not only led the world, it reinvented the world. Now that the competition between nations has turned from capturing territory to capturing market shares, the ability to master the process of turning innovations into jobs will determine the future prosperity of this state and this nation. We realize today that our wealth is not our gold, our oil, or our aircraft carriers, but our intellectual resources. The United States of America is home to more Nobel Laureates and more scientific breakthroughs than any other two nations in the world. And yet too many fear that our best days as an economic and technological power have passed. I do not believe that, and I know you don't accept it either.

To a large extent, America's greatness has been based on scientific brilliance and economic daring. Yet more than ever, intellectual property law is the bridge between scientists and entrepreneurs. And more than ever, good, committed intellectual property lawyers are the rainmakers for our next great economic harvest.

We're pleased to have you here in Austin, Texas.

Thank you very much.

Footnotes

^{d1} A speech given at the American Intellectual Property Law Association Spring Meeting, April 29, 1993, Austin, Texas.

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