

Maine Science & Technology Foundation  
Technology Commercialization Strategies  
Interactive Workshop  
Portland, Maine  
October 3-7, 1995  
Luncheon Speech, October 3, 1995

INTELLECTUAL PROPERTY LICENSING AND TECHNOLOGY TRANSFER:  
REFLECTIONS

Good afternoon!

Many thanks for the very kind introduction. I can hardly wait to hear what I'm going to have to say now!

And many thanks for the invitation to visit with you and talk with you briefly about the exciting field of Licensing and Technology Transfer which unquestionably is one major strategy in the panoply of Technology Commercialization Strategies.

My job now is to give this luncheon talk and, I guess, your job is to listen to me. But should you finish before I do, feel free to sit back and take a snooze — it is siesta time, isn't it? Woody (Woodrow Clark) will crack the whip and wake you when it's time to get back to the saltmines.

I can't get too serious about any topic now anyway for three other good reasons: my talk is supposed to be non-legalistic, fairly broad and very short.

So let me just give you some reflections of mine after almost 40 years in the field about what's happened and what's happening in the fascinating world of Licensing and Technology Transfer.

It's indeed a most interesting world because for one thing it's so interdisciplinary. It mixes technology, business and law and deals with cutting-edge innovations, creative business arrangements and intricate legal issues.

The most interesting and challenging licensing experience I had in my whole career was when I had to go to New Zealand to chase down an elusive invention and an elusive inventor, owner and licensor and had to come back with a signed patent application ready for filing in the U.S. and Canada and an executed exclusive license agreement, in shape for execution by my Management.

The invention had to do with a bovine parturition control method invented by a veterinarian of a dairy company and I did come back with a finished patent application and an assignment with installment payments based on net sales of the parturition-inducing product. Why an assignment and not a license? I don't recall — perhaps intuition because it was not until later that I learned of Tom Arnold's suggestion in his opus on the "Law of Licensing" that

what is perceived by the businessman as an 'exclusive license,' is best negotiated into the form of a patent assignment ... with rights to reversions of title if royalties are not paid ... because the exclusive license differs from an assignment only in areas (like who sues infringers and has authority to

compromise in settlement) which may be better borne by the party actively in the business than by the passive transferor of the technology.

(New Zealand — very interesting place — don't miss an opportunity to visit it.)

As you can see when you are in licensing in one way or another, you don't have to join the Navy to see the world. Guess who holds the Guinness Book of Records record as "The World's Most Traveled Passenger?" It's Fred Finn. Who is he? A New Jersey-based international licensing consultant. His record by 1992: 2000 transatlantic crossings, 687 on the Concord, 25,000 hours in air, more than 10 million miles flown and about \$6.5 million paid in airfares. (The only record I hold was flying all across the transatlantic standing room only).

Now you know, of course, that Licensing is a very effective and civilized way of forming business relationships and transferring technology and by far preferable to infringement litigation which has become an ugly trend and is very much on the increase. (Dog-eat-dog world!)

One attorney of a big New York law firm goes around the country, giving talks at any and all association meetings, wherever anybody will listen to him, particularly at meetings of the LES, on guess what topic? You won't believe this. It is "Patent Litigation and Trials: The Alternative to Licensing".

Note he means not just starting a lawsuit and then perhaps settling it but actually going through a knock-down, drag-out fight to the end in the courts. You have to understand he is with a big antitrust law firm whose business dried up when the Antitrust Division of the Justice Department went to sleep in the '80's, which forced antitrust lawyers to switch to IP litigation. And you thought licensing was one of the alternatives to litigation because nobody wins in litigation except the lawyers.

Speaking of lawyers and litigation, I have a chicken-and-egg riddle for you: Do we have so many lawyers because we have so much litigation — oh yes we are a very litigious society — or do we have so much litigation because we have so many lawyers — and yes we have a lot of lawyers; in fact, this country, with less than 5% of the world's population, has more than 90% of the world's lawyers — almost one million lawyers. Well, it isn't really a chicken and egg problem if you understand that in a town which is too small for one lawyer to survive, two will make an excellent living.

Lawyer jokes abound because we have indeed perhaps too many lawyers. But as a card-carrying member of the ABA I have to be careful about telling lawyer jokes because the ABA has appropriated — and I am not pulling your legs — 3/4 of a million dollars to stamp out lawyer jokes. (After S.F. tragedy. Overreaction?)

If you promise not to report me to the ABA, I'll give you a couple of samples. (Train from St. Petersburg to Moscow with a Russian, Cuban and American businessmen in a first-class compartment. NIH, short of test animals but not lawyers. — You know of course the difference between a catfish and a lawyer. One is a bottom-dwelling, mud-eating creature and the other is a fish.)

Incidentally, if you need to retain an attorney, be sure you get a green-light rather than a red-light attorney. What's the difference? The latter tells you that this and that can't be done and the former

tells you how it can be done. In other words, the green-light attorney tells you how something can be done that the red-light attorney told you can't be done.

In a more serious vein, without getting too serious, let's talk a little bit about the always important subject of money and royalties and quid pro quos.

There used to be a time when there was little or no licensing. Westinghouse until just a few years ago never licensed in nor licensed out. CIBA-GEIGY didn't use to.

When they were developing a product and a patent issued to a third party that was earlier so that they were not going to have a patent position, they just scuttled the project. They did not even bother to inquire about the availability of a license.

It had to be home-grown technology and the NIH factor played a big role.

Also, in those days — the good old days — it was easier to come up with inventions, to develop products and get them approved by the government. The hottest product that CIBA-GEIGY had at that point, namely, Atrazine, a corn herbicide, produced \$3.5 billion in profits, not sales, but profits, \$3.5 billion dollars over the 17 years of the patent life. The patent issued the very same year in '59 that the EPA or the predecessor agency gave market approval, so there was a clear-cut 17 years of exclusivity from the introduction of the product to the end of the patent life.

There wasn't any licensing to speak of years ago because everybody could produce and generate enough products in-house. Nowadays, you can't do that because too much money that used to go into productive, inventive activity from which you got patentable inventions now goes into non-productive, non-inventive activity like toxicity studies and field trials and all that. That is necessary. We know it's necessary but millions of dollars go into that and not into basic research where you get inventions generated. So you just can't rely on your own capability to fill the product pipeline, the lifeblood of any company, so you've got to go out and license in.

Nowadays easily ten years go by, ten years of the patent life, before one can get market approval to bring out products in the agrichemical/pharmaceutical areas. And commercialization lead times are much longer in other areas also, e.g. electronics and aerospace, 5-15 years; machine tools and automotive, 10-20 years; energy, 15-20 years.

So there's been a tremendous change in just the basic attitudes towards licensing and the need for licensing. There was none before and even though one can trace licensing back to before the turn of the century, these were special situations. Interlocking situations, patent squabbles, etc. Like we have now in biotechnology. Everybody is doing the same research in the same areas and that leads to overlapping inventions. Patents are coming out that are conflicting, interlocking, blocking. This is a settlement situation for the most part rather than a straight-forward licensing situation.

Furthermore, years ago it paid to infringe someone's patent. The only downside risk was damages that would amount to only what a reasonable royalty would have been. There were no injunctions that courts handed down in patent cases. Most of the time patents were invalidated. Even if a patent did stand up in court, all that happened was a judgment awarding reasonable royalties as measure of damages. So it paid to infringe. That, of course, has changed completely. It's a new

ball game, now. This is the golden age for patents. Intellectual property is now worth something. In fact it is so popular, glamorous, sexy that even our first lady, Hillary Clinton, was billed as an IP lawyer, according to Associated Press releases in 1992.

In this day and age, courts read the riot act to infringers. Patents are held valid much more often and, in addition, injunctions issue more frequently and are not stayed pending appeals and increased damages — triple damages — are awarded when years ago there were just no increased damage judgments at all. Of course, the hope was that this new climate for patents, this golden age for patents, would lead to less litigation. But what happened is that it has led to more litigation because more and more people are itching to sue for patent infringement which they would not have done years ago.

As a matter of fact, questions have been raised whether the pendulum is not swinging too far and whether we have not reached a stage of patent blackmail. But that's another big topic.

On the negotiation and drafting side of licensing and technology transfer clearly a new wind is blowing too, and the Licensing Executives Society (LES) deserves much credit for the improvement. Former practices of taking advantage of one's licensing partner (I win-you lose) have been replaced by win/win attitudes. The realization has taken hold generally that the only viable license is one that results from a win/win approach and passes the "fairness test" (Would you sign this agreement for the other side as well as for your own company?).

Well, this new climate, this new respect for patents, and the higher value of intellectual property, does lead to new or greater incentives for R&D because you know you can patent your inventions and the patents are going to stand up. The patents are going to be more valuable and we know that the patent system is a tremendous incentive to R&D and investments. Incidentally, according to CAFC Judge Rich, the patent system provides four incentives, namely, to invent, to disclose, to "invent around" and to invest and it is the incentive to invest which is the most important one.

And this new climate also leads to higher quid pro quos and royalties. Clearly the stakes are up.

When you talk about royalties, you have to take the nature of the intellectual property rights into account. The validity and the value — that is a big factor when it comes to royalties. How strong is the patent? Courts look at basic patents more favorably. And you can enforce such patents more easily. It's a big talking point in license negotiations.

Actually, while the strength — and number — of the underlying IPR's are very important, there are 100 factors — yes 100 — according to Tom Arnold's 1988 Licensing Handbook (Appendix C, Clark Boardman) to be taken into account in determining royalty or pricing a technology license. But not all are applicable to each situation. Still, this enumeration of the 100 factors is a very handy checklist for negotiations.

The nature of the license naturally is also an important determinant. Is it exclusive, semi-exclusive or sole, non-exclusive? Are sublicensing rights included? Is it world-wide, hemispheric, national, regional, e.g. east of the Mississippi or only Maine?

Other factors are, for instance:

- The stage of development of the technology;
- Access to ongoing R&D via grantbacks and grantforwards;

- Structure and spread of payments — front money, minimum royalties, payment schedule, etc.;
- Warranties, indemnification or hold-harmless obligations, especially vis-a-vis possibly dominant third-party patents;
- Most-Favored-Licensee clauses, etc.

Incidentally, according to Tom Arnold — and this makes sense — the cost to licensor of the development of the technology is not a factor. The public's interest in buying a product and thus the value of a technology in the marketplace is "essentially unrelated to the cost of developing it" except insofar as it aids estimation of the cost in time and money of the licensee's alternative, namely, competitive development of equivalent technology which limits what the licensor can charge.

In this connection, it is important to keep in mind that it is the licensee's economics not the licensor's that controls the royalty determination or royalty setting.

Now what about industry standards? Aren't there norms in each industry to go by? This is the common belief as there are figures often being bandied about as industry averages. John Romary of Finnegan, Henderson in Washington, in a very recent article on "Evaluating the Value of US Patent License" (8 EIRR 385, 389 1995), called industry average royalty rates "folklore" and "suspect as a royalty-rate guide."

For example, a 5% running royalty for a non-exclusive license helps very little in evaluating an exclusive license on different, but related technology and a 1.5 % running royalty on technology that can be effectively designed around is equally unavailing in pegging the value of a pioneer patent critical to the competitor.

However, Romary allows as how such averages provide additional data points, and lists for chemicals 1-5%, electronics <1-5%, computers 3-5%, consumer products 2%, pharmaceuticals 4-15%. He states that these figures are based on the net sales price and a non-exclusive license and that a 20-50% premium may be a reasonable average for an exclusive license.

Given the unreliability of industry standards and the need to consider numerous factors in royalty setting, it is clear — and I stress this in my Licensing course — that the royalty is not the first thing but the last thing to talk about and agree upon in negotiations. Only after all the license terms are in place and all the relevant factors are considered, is it time to settle the money terms and these can include lump sum payments as front and/or milestone payments, running royalties, minimum and/or maximum royalties, descending- and ascending-scale royalties and any combination of the above. You can be quite creative and sophisticated about fashioning a win/win licensing and technology transfer arrangement.

Another thing to be kept in mind is that when it comes to royalties less may be more and greed rarely if ever pays off. [Horror story: NRDC.]

Interestingly, licensors are often not satisfied nowadays with mere running royalty payments amounting to but a few per cent of net sales of licensed product. They prefer or insist on a more substantial quid pro quo, such as, cross-licenses under IPR's of licensees to commercialize technology or products of licensees inasmuch as more profit can be realized by manufacturing and

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selling products, especially when they are protected by IPR's, than by merely collecting even relatively high royalties.

And because royalties have gone up considerably due to the greater enforceability and value of IPR's, option agreements are on the increase to give licensee time to consider his or her true interest in commercializing the technology or product in question.

Well, here you have a few of my reflections, musings and truisms, if you will, about IP Licensing and Technology Transfer, what is was like then and what it is like now.

I think it's time now for Woody to crack the whip, wake you up and take you back to the saltmines.

Thank you very much for your attention.

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