What Are My Chances? From Idea Through Litigation

[October 16, 2003]

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Intellectual Property Law

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I. Idea to Application

Of the millions of ideas generated annually, only a small percentage ever make it past the initial burst of inspiration. As Thomas Alva Edison once stated: "Genius is one percent inspiration and ninety-nine percent perspiration." Still according to the statistics released by the USPTO, enough perspiration was generated for 326,508 utility patent applications to be filed in 2001. (*See* U.S. Patent Statistics, Calendar Years 1963-2001, www.uspto.gov/web/offices/ac/ido/oeip/taf/reports.htm), approximately 326,508 utility patent applications were filed in 2001. Thus, working backwards, there were approximately 32 and half million ideas generated that year.

II. Application to Patent

Once filed, what are the chances that the idea will become an issued patent? Statistics complied by Patent Ratings, LLC show that only about one in three patent applications are allowed. (*See* Percent of Patent Applications Granted by 12/31/00, www.patentratings.com/002/chart_19.sv.) However, since a continuation application may be filed to further prosecute an idea, greater than one in three ideas make it though the USPTO. In 2000, Q. Todd Dickinson, the Commissioner of the USPTO at the time, stated Â– at the *Internet Society Panel on Business Method Patents* Â– that, on average, two out of every three ideas filed as utility patent applications eventually resulted in an issued patent. (*See* transcript of panel held by the Washington D.C. Chapter of the Internet Society, *Internet Society Panel on Business Method Patents*, held October 23, 2000, www.oreillynet.com/lpt/a//policy/2000/10/23/isoc.html.)

On average, an application is pending in excess of 14 months until the first office action by the USPTO and over two years until issuance or abandonment. (*See* Patent Public Advisory Committee Public Session, November 13, 2002, at 9, which can be accessed through the USPTO at www.uspto.gov/web/offices/ac/ido/oeip/taf/reports.htm and Corporate Plan Â– 2001, Patent Business at 24, www.uspto.gov/web/offices/com/corpplan/pf04.pdf.) Every year there are a several applications that only get issued after an appeal to the Board of Appeals at the USPTO. During 2002, the Board of Appeals issued 3,894 decisions, reversing the examiner nearly 50% of the time. (*See* Patent Public Advisory Committee Public Session, November 13, 2002, at 31.) In the end, slightly over 166,000 utility patents were granted in the United States in 2001, the last year for which statistics have been released. (*See* U.S. Patent Statistics, Calendar Years 1963-2001, www.uspto.gov/web/offices/ac/ido/oeip/taf/reports.htm.) Interestingly, an increasing percentage Â– over 46% Â– of these issued patents are owned by

foreign entities. (*See* Patent Trends, Calendar Year 2001,
www.uspto.gov/web/offices/ac/ido/oeip/taf/pat_tr01.htm.)

Just because the patent has now issued does not mean you necessarily get to forget about the
USPTO. For example, you may end up in a reissue proceeding. In 2001, approximately 500
reissue applications were granted. (*See* Technology Assessment and Forecast Report, Reissue
Patents, 1977-2001, www.uspto.gov/web/offices/ac/ido/oeip/taf/reissues.pdf.)

III. Patent to Litigation

Now that you have a patent, what should you do with it? Once issued, most patents retire to a
file cabinet and are not the source of revenue generating activities. Approximately, 15-20% of all
patents do not have their first maintenance fee paid and therefore go abandoned. (*See*
Abandonment Rate by Year Patent Issued, http://www.patentratings.com/002/chart_20.sv and
Jonathan A. Barney, "A Study of Patent Mortality Rates: Using Statistical Survival Analysis To
Rate and Value Patent Assets," *AIPLA Quarterly Journal*, Vol. 30, No. 3 at 338) Nearly half of all
patents are abandoned prior to full term. (*See* Id.)

Recently, around one percent of patents find their way into the United States District Courts.
(*See* Jean O. Landjouw and Mark Schankerman, "Characteristics of Patent Litigation: A Window
on Competition," 32 *RAND J. Econ.*, No. 1 (2000) at 131.) Depending into which technical area
a patent falls, the chance of a patent being named in a litigation varies widely. Patent Ratings
LLC places the chances as high as 0.41% for medical patents to as low as 0.16% for chemical
patents. The other four categories are biotech 0.29%, mechanical 0.29%, computer/software
0.27% and electrical 0.22%. (*See* Litigation Rates by Field, U.S. Utility Patents Issued 1976-
2000, www.patentratings.com/002/chart_26.sv.) Using different statistical methods, others place
the chance of litigation on a chemical patent at 1.2% and over double that rate for computer,
biotechnology and non-drug health patents. (*See* Jean O. Lanjouw and Mark Schankerman, "An
Empirical Analysis of the Enforcement of Patent Rights in the United States," (Feb. 2002) at 2.)
For "the most 'valuable' drugs and health patents" the litigation rate has been estimated at
greater than 25%. (*See* Jean O. Landjouw and Mark Schankerman, "Characteristics of Patent
Litigation: A Window on Competition," 32 *RAND J. Econ.*, No. 1 (2000) at 131.) Still, out of the
166,000 patents that issued in 2001 under 1,700 will ever be litigated over their lifetime.

Despite such a small percentage of patents ever making their way into court, due to the
relatively long life of patents and the fact that some patents are litigated multiple times,
approximately 2,500 patent cases are filed each year. (*See* Gauri Prakesh-Canjels, Ph.D,
"Trends in Patent Cases: 1990-2000," *IDEA*, Vol. 41, No. 2 (2001), at 285.)

Interestingly, the chance of any particular patent being litigated decreases with the age of the
patent. While approximately 1,400 patents per million are litigated in their first year of issuance,
that number decreases to approximately 700 patents per million for patents five years old, 500
patents per million for patents ten years old, under 400 patents per million for patents 15 years
old, and fewer than 100 per million for patents during their later years end up in litigation. (*See*
Average Patent Litigation Rates, Reported Litigation Cases Filed 1996-2000,
www.patentratings.com/002/chart_40.sv.) On average, a patent is five years old when litigated.
(*See* Reported Patent Litigation vs. Patent Age, Breakdown by Year Case Filed (1995-2000),
www.patentratings.com/002/chart_38.sv.) However, certain technical areas, such as electrical
patents tend to get litigated for the first time later in life, closer to seven years old. (*See* Patent
Litigation vs. Patent Age (Reported Cases 1995-2000),

www.patentratings.com/002/chart_37.sv.) The chance of a particular patent being litigated also appears to decrease with the size of the portfolio to which the patent belongs. (*See* Jean O. Lanjouw and Mark Schankerman, "An Empirical Analysis of the Enforcement of Patent Rights in the United States (Feb. 2002)," at 3-4, 35.)

While according to Kevin Rivette and David Klien there may be "Rembrandts in the Attic," only a few will ever make it to unlocking their value at trial. (*See* Kevin Rivette and David Klien, *Rembrandts in the Attic: Unlocking the Hidden Value of Patents*, Harvard Business School Press 1999.)

IV. Will I Survive Litigation

Out of the 2,500 cases filed each year, barely one in seven terminates with a court's judgment. (*See* Gauri Prakesh-Canjels, Ph.D, "Trends in Patent Cases: 1990-2000," *IDEA*, Vol 41, No. 2 (2001), at 288.) Most of the remaining cases were settled. (*Id*. at 289.) It has been observed that most settlements occur prior to the pre-trial hearing. (*See* Jean O. Lanjouw and Mark Schankerman, "An Empirical Analysis of the Enforcement of Patent Rights in the United States (Feb. 2002)," at 3.) Thus, the vast majority of the patents retire, perhaps a bit bruised and battered, back to the file cabinet until retired at the ripe old age of 20 years.

Of those patents that go through to a court ruling, many do not survive validity challenges. Approximately 40% of those patents challenged on validity grounds are found invalid on summary judgment. Assuming summary judgment of validity is survived, approximately 30% are found invalid at trial. (*See* Patent Litigation Â– Invalidity Findings Â– U.S. District Ct. Final Jmts. 1987-1998, www.patentratings.com/002/chart_32.sv.)

The University of Houston Law Center has tracked published court decisions by the myriad ways patents are found invalid from 2000 through the first half of 2002. (*See* University of Houston Law Center at patstats.org, which collected information for 2000, 2001, and the first two quarters of 2002.) While the methodologies, used to collect the information, present a level of uncertainty, the information does present an accurate picture of which defenses tend to be more successful. A summary chart indicating the total number of published decisions for each ground for invalidity and the percentage ruling is provided below, where "P" stands for Patent Holder and "I" for alleged Infringer.

CHART A Â– Validity Decisions 2000-2002				
Invalidity Grounds	Totals 2000-2002		%	
	For P	For I	For P	For I
102(a)	25	7	78	22
102(b) -- publication	35	19	65	35
102(b) -- public use	8	7	53	47
102(b) Â– on sale	21	26	45	55
102 (c)	0	0	0	0
102(d) Â– prior	0	0	0	0

foreign				
102(e) -- earlier US	7	2	78	22
102(e) -- wrong inventor	11	1	92	8
102(g)	15	9	63	38
103	70	38	65	35
112 -- description	18	12	60	40
112 -- enablement	16	14	53	47
112 -- best mode	12	2	86	14
112 -- indefinite	17	7	71	29

As can be noted in Chart A, the information from the study indicates that, for example, the most successful challenge to a patent's validity appears to be an on-sale defense. In contrast, least likely to succeed were challenges based on either sections 102(a) and 102(e), as well as a challenge to best mode under Section 112. Some sections, including Sections 102(c) and 102(d), had no reported decisions during the tracking period.

Validity is only one piece of the equation on whether the patent will survive. There are also equitable challenges. The University of Houston also tracked these results. As shown below, Chart B indicates that rarely does the patent fail to survive a challenge on equitable grounds.

CHART B Â– Equitable Decisions 2000-2002				
Invalidity Grounds	Totals 2000-2002		%	
	For P	For I	For P	For I
Inequitable Conduct	53	15	78	22
Patent Misuse	3	0	100	0

However, since a defendant can proceed on multiple grounds against a patent, the cumulative effect of all validity and equitable challenges results in a patent surviving a challenge to its validity approximately 55% of the time. (*See* Judgements Finding Patent Invalidity (U.S. District Ct. Final Jmts. 1987-1998), www.patentratings.com/002/chart_34.sv.)

As shown in Chart C below, the chances of success in proving literal infringement are only about 30%. Although the doctrine of equivalents does provide a second bite at the apple, the odds of proving infringement under the doctrine of equivalents however are substantially less Â– about 15%. One may also get a third chance under inducement and contributory infringement. Where an argument exists that the alleged infringer is inducing infringement, or contributorily infringing, then a patentee has a better than 40% chance of proving infringement.

CHART C Â– Infringement Decisions 2000-2002

Infringement	Decisions 2000-2002		%	
	For P	For I	For P	For I
271(a) Â– Direct Literal	110	271	29	71
Doctrine of Equivalents	38	215	15	85
271(b) Â– Inducing	17	24	41	59
271(c) Â– Contributory	13	15	46	54

Overall, what this means is that there is approximately 30% of patents litigated through judgment at the district court are found both valid and infringed. (*See* Judgments for Patent Owner (Patent Valid & Infringed) (U.S. District Cr. Final Jmts. 1987-1998), www.patentratings.com/002/chart_35.sv.) This is consistent with statistics indicating that during the 1990-2000 time-period, depending on the year, 57% to 78% of all patent cases terminated during the year with no monetary award to the patent owner. (*See* Gauri Prakesh-Canjels, Ph.D, "Trends in Patent Cases: 1990-2000," *IDEA*, Vol. 41, No. 2 (2001), at 290.)

Then there is always the appeal process.

V. Conclusion

The next time someone asks Â– "what are my chances?" Â– chances are you may now have an answer.