Industry Norms And Reasonable Royalty Rate Determination

By Michelle Porter, Robert Mills and Roy Weinstein

Survey of Industry Royalty Rates and Discussion of Their Application in the Hypothetical Negotiation Construct

Abstract

Georgia-Pacific contemplates that parties to infringement litigation engage in a hypothetical negotiation assumed to occur just prior to the date of alleged infringement.[1] The hypothetical negotiation is intended to produce a license agreement similar to what a willing licensor and willing licensee would have agreed to, neither under any compulsion to enter into an agreement, assuming the patents in question were understood to be valid and infringed. Consistent with *Georgia-Pacific*, the parties may consider 15 factors, among other things, in connection with their negotiation. Consideration of these factors often is referred to as a *Georgia-Pacific* analysis, the outcome of which is intended to provide damages "adequate to compensate" the patent holder for infringement.[2]

Within the hypothetical negotiation construct, industry royalty rates often are considered as part of the analysis and determination of a reasonable royalty rate. Indeed, *Georgia-Pacific* factor 12, "the portion of profit or selling price that may be customary in the particular business or in comparable businesses to allow for the use of the inventions or analogous inventions," calls for an evaluation of royalty rates paid for licenses to technology in the relevant industry.

The sections that follow set forth an empirical study of industry license agreements. Results from this study are used to discuss how observed industry average royalty rates properly can be utilized in the hypothetical negotiation construct. These results are not intended to serve as a substitute for analysis of *Georgia-Pacific* factors 1 and 2, which relate to established royalties for the specific technology in question. Instead, the agreements which we have analyzed here provide a useful context within which rates for specific patent claims can be assessed.

I. Introduction

Use of industry royalty rates within a specific hypothetical negotiation construct requires that industry royalty rate observations be identified for the industry under examination. Once royalty rate data are collected, they often can be used to assess trends and norms in the industry.

This article sets forth statistical analyses of publicly available royalty rate information for the medical device, pharmaceutical and chemical industries. These analyses were performed in order to determine the distribution and range of royalty rate observations within each industry as well as trends, if any, with respect to time. Specifically, we study industry royalty rates to determine: 1) whether industry royalty rate observations are concentrated around a certain royalty range; 2) whether the range of observed industry royalty rates is sufficiently narrow that meaningful conclusions can be drawn with respect to the average royalty rate for a particular industry; and 3) the extent to which industry royalty rate observations vary over time.

■ Michelle Porter, Consultant, Micronomics, Inc., Los Angeles, CA., U.S.A.
E-mail: mporter@micronomics.com
■ Robert Mills, Vice-President, Micronomics, Inc., Los Angeles, CA., U.S.A.
E-mail: rmills@micronomics.com
■ Roy Weinstein, President, Micronomics, Inc., Los Angeles, CA., U.S.A.
E-mail: rweinstein@micronomics.com

II. Empirical Study And Discussion

To conduct these analyses, industry royalty rate information was collected from publicly available sources for the chemical, medical device, and pharmaceutical industries using 10k Wizard and RoyaltyStat.[3] The RoyaltyStat search engine allowed for searches of patent license agreements classified by SIC code; 10k Wizard allowed for searches of key words contained within exhibits of all SEC filings. The search results include only agreements executed between 1984 and the pres-

1. *Georgia-Pacific Corporation, Plaintiff v. United States Plywood Corporation*, Defendant, 318 F. Supp. 1116, 166 U.S.P.Q. 235, May 28, 1970.

2. 35 U.S.C. ¶ 284 ("Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no case less than a reasonable royalty…").

3. Other sources considered include IPRA publications, PharmaDeals Agreements, Recombinant Capital (ReCap), and RoyaltySource.

ent. A list of the SIC codes searched by industry is set forth at Appendix A.

Each agreement identified was reviewed as a candidate for empirical study. Excluded from the analysis were cross-license and settlement agreements, agreements that indicated no running royalty consideration, agreements between related parties, and agreements that were redacted with respect to payment information. For the remaining agreements, basic information including the date, licensor, licensee, licensed property, royalty rate(s), and relevant SIC code and industry was summarized and included in our empirical analysis (see Appendix B for a summary of these agreements).

The database of royalty rate information studied is comprised of 77 medical device license agreements, 90 pharmaceutical license agreements and 21 chemical license agreements.[4] This database contains publicly available information accessible through SEC filings. As such, *the database excludes* agreements that do not represent a "material contract" as defined by United States Code, *as well as agreements executed between private firms and individuals.*[5] *Accordingly, there is some possibility of selection bias in the sense that the sample of royalty rates we have examined may not be representative of the entire population of industry royalty rates.*[6] *Although the presence of selection bias could potentially impact the outcome of the statistical testing described below, it does not diminish the importance or validity of individual royalty rates presented herein.*

Once the database of usable royalty rate information was compiled, a series of statistical analyses were undertaken to examine: 1) royalty rate distribution frequency within each industry; 2) the confidence interval around each industry sample mean royalty rate at the 95 percent level of confidence; and 3) royalty rate time series trends within each industry. For those agreements that specified more than one rate, the average of the low and high royalty rates was taken.[7]

Our analysis does not account for certain factors. These include exclusivity, geographic scope, and the stage of development of the licensed technology, which may have an impact on observed royalty rates. In addition, while Georgia-Pacific addresses licenses to "naked" patents, most of the rates included in our database relate to agreements in which not only a patent was licensed. The referenced agreements may include licenses to patents along with know-how, copyright or trademark rights. The results of these analyses are discussed in the sections that follow.

A. Distribution Frequency

The distribution of royalty rates observed in the sample of each industry was analyzed to determine whether royalty rates within each industry are concentrated within a certain range or are widely dispersed. Results from the analysis show that observed royalty rates within each industry are concentrated within a certain range. Most observations in the medical device industry and pharmaceutical industry fall in the two percent to five percent range, while rates in the chemical industry fall in the three to six percent range. Figures 1-3 depict the frequency of sample royalty rate observations by industry.

The most frequently observed rates in the medical device industry sample are three percent (16 observations), five percent (16 observations), two percent (13 agreements) and four percent (11 agreements). Observations in this range comprise 73 percent of total number of medical device agreements contained in the sample. The mean royalty rate is 4.35 percent, while the median rate is four percent. The difference between the mean and median rates reflects the slight right skew in the sample data distribution.

Observed royalty rates in the pharmaceutical industry sample fall within the same range, but with a slightly different frequency distribution. The most frequently observed pharmaceutical royalty rates in the sample are three percent (19 observations), four percent (13 observations), five percent (10 observations) and two percent (10 observations). These observations constitute approximately 58 percent of total observed pharmaceutical agreements. The mean pharmaceutical industry sample royalty rate is 5.66 percent and the median of the sample is 4.38 percent. Once again, the difference between the mean and median rates reflects the slight right skew in the sample data distribution.

Finally, royalty rates in the chemical industry fall within the three to six percent range, with the most frequently observed rates being three percent (nine observations) and six percent (four observations). These observations comprise approximately 62 percent of all observations in the sample. The mean rate of the sample is 3.70 percent, while the median royalty rate is three percent.

Based upon the distribution frequency of royalty rates sampled, we conclude that royalty rates within each

4. This is considerably fewer than the 480 agreements that were subject of initial review.

5. 15 U.S.C.A. § 78m, U.S.C.A. § 781, and U.S.C.A. § 77aa.

6. A.H. Studenmund, *Using Econometrics: A Practical Guide*, Fourth Edition, 2001, pp. 543-544.

7. High and low rates in the observed agreements typically reflect different sales volumes, use of different numbers of patents, etc.

Figure 1: Publicly Available Patent License Royalty Rates, Medical Device Industry, 1986 - 2006

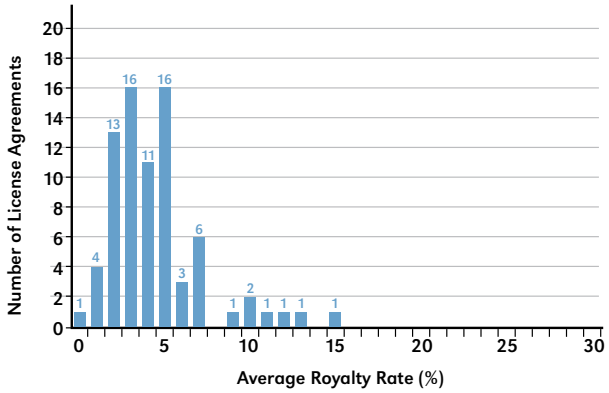


Figure 2: Publicly Available Patent License Royalty Rates, Pharmaceutical Industry, 1984 - 2007

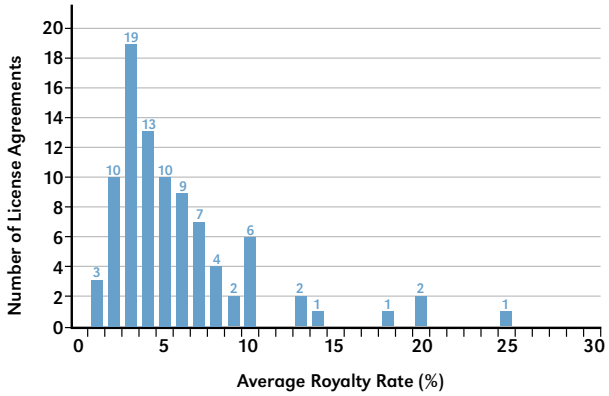
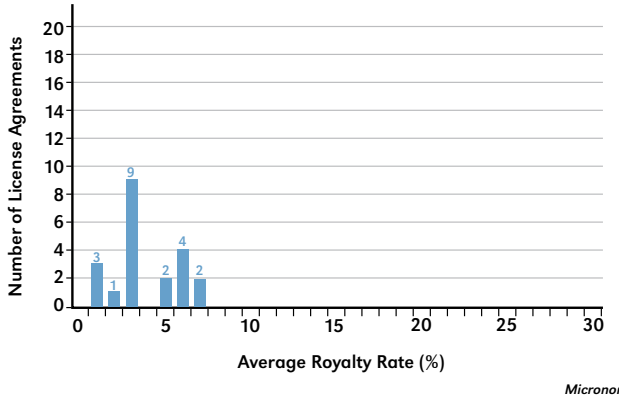


Figure 3: Publicly Available Patent License Royalty Rates, Chemical Industry, 1992 - 2007



surveyed industry converge toward a relatively narrow range of rates. This is significant because it indicates the existence of common industry royalty rates within the studied industries.

B. Confidence Intervals

The inferential power of each sample was determined by calculating the 95 percent confidence interval around each mean. A confidence interval is a statistical range with a specified probability, in this case 95 percent, that a given population parameter will be found within that range.[8] In the present instance, the confidence intervals constructed at the 95 percent level depict the range in which the "true" industry average royalty rates are expected to fall. This conclusion rests on the assumption that the samples collected are representative and random within the context of all executed agreements in the studied industries.[9]

To construct the confidence intervals, the mean royalty rate (represented by the variable x), standard deviation (represented by the variable σ) and sample population size (represented by the variable n) associated with the sample data in each industry were determined.[10] Using the t-statistic (represented by the variable $t_{\alpha/2}$) for a normally distributed population (with n–1 degrees of freedom), a 95 percent confidence interval around each industry average royalty rate was calculated. The equations set forth below were used to calculate the 95 percent confidence interval around each sample set of royalty rate observations.[11]

Lower confidence bound: $x - t_{\alpha/2} (\sigma/\sqrt{n})$

Upper confidence bound: $x + t_{\alpha/2} (\sigma/\sqrt{n})$

8. *The American Heritage® Dictionary of the English Language*, Fourth Edition, 2000, Houghton Mifflin Company. Also see Bowerman, et al., *Business Statistics in Practice*, Second Edition, McGraw-Hill Irwin, 2001, pp. 239 and 242.

9. Though it is not clear that this assumption is violated there is the possibility that selection bias exists as a result of reliance upon only publicly disclosed agreements.

10. Bowerman, et al., *Business Statistics in Practice*, Second Edition, McGraw-Hill Irwin, 2001, p. 243. Picconi, et al., *Business Statistics: Elements and Applications*, HarperCollins, 1993, p. 260.

11. Bowerman, et al., *Business Statistics in Practice*, Second Edition, McGraw-Hill Irwin, 2001, p. 243.

Table 1 shows the results of each industry confidence interval calculation.

Since the observed average royalty rate in the medical device industry sample is 4.35 percent, one can say with 95 percent confidence that the "true" average royalty rate in the medical device industry falls within 0.64 percentage points of this value. The confidence interval for the pharmaceutical industry sample is slightly broader. The average royalty rate in the pharmaceutical industry was determined to be within 0.91 percentage points of the sample average royalty rate at a 95 percent level of confidence. Finally, it was determined with 95 percent confidence that the population average royalty rate in the chemical industry falls within 0.88 percentage points of 3.70 percent.

This analysis indicates that the range of expected average industry royalty rates is sufficiently narrow that meaningful conclusions can be inferred from the averages. We conclude that a relatively precise estimate of average expected royalty rates could be determined for all of the industries studied.

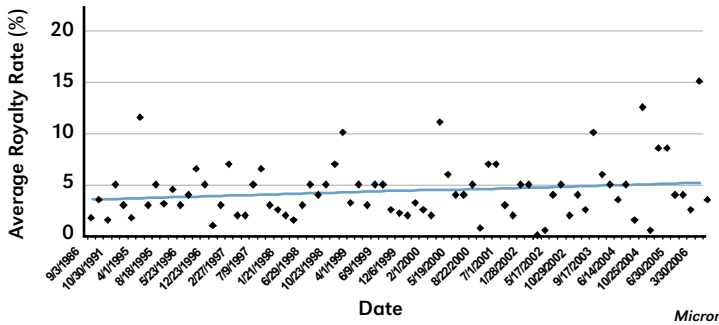
Table 1: Summary of Royalty Rate Statistics Publicly Available License Agreements

			95% Confidence Interval			
	Industry	Number of Observations	Average Royalty Rate	(+) / (–)	Lower Bound	Upper Bound
	(1)	(2)	(3)	(4)	(5)	(6)
					(3) – (4)	(3) + (4)
1.	Medical Device	77	4.35%	0.64%	3.71%	5.00%
2.	Pharmaceutical	90	5.66%	0.91%	4.75%	6.57%
3.	Chemical	21	3.70%	0.88%	2.82%	4.57%

Detail may not equate to total due to rounding.

Micronomics, Inc.

Figure 4: Publicly Available Patent License Royalty Rates Medical Device Industry, 1986 -2006



Micronomics, Inc.

Table 2: Summary of Royalty Rate Statistics Publicly Available Medical Device License Agreements

			95% Confidence Interval			
	Time Period	Number of Observations	Average Royalty Rate	(+) / (–)	Lower Bound	Upper Bound
	(1)	(2)	(3)	(4)	(5)	(6)
					(3) – (4)	(3) + (4)
1.	9/3/1986 - 2/27/1997	20	3.86%	1.14%	2.72%	5.00%
2.	5/30/1997 - 12/6/1999	20	4.13%	0.97%	3.15%	5.10%
3.	12/9/1999 - 9/1/2002	20	3.96%	1.22%	2.74%	5.17%
4.	10/29/2002 - 3/31/2006	17	5.68%	1.72%	3.96%	7.39%
5.	**9/3/1986 - 3/31/2006**	**77**	**4.35%**	**0.64%**	**3.71%**	**5.00%**

Micronomics, Inc.

C. Time Series

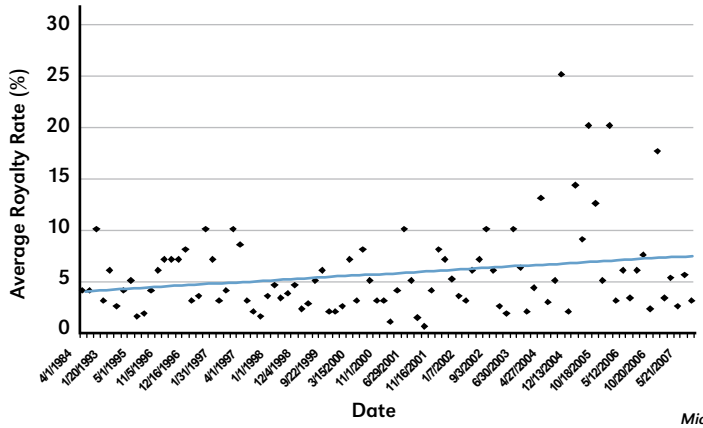
Observed royalty rates were segregated with respect to the effective date of each agreement in order to determine whether rates increased, decreased or remained constant over time. Results from the analysis indicate that rates in the medical device and pharmaceutical industries have been increasing.[12]

Rates in the medical device industry sample increased from an average of 3.86 percent in the late 1980s and 1990s to 5.68 percent between 2002 and 2006. The upper and lower bounds of confidence intervals around average royalty estimates also increased over time. Figure 4 and Table 2 depict results from time series analysis of sample medical device license agreements.

Observed royalty rates in the pharmaceutical industry reflect a similar upward trend. Average royalty rates in the pharmaceutical industry sample increased from 5.21 percent in mid-to-late 1980s and early-to-mid 1990s to 8.52 percent between 2002 and 2006;

12. Due to the limited number of sample observations, a time series analysis of the chemical industry was not conducted.

Figure 5: Publicly Available Patent License Royalty Rates Pharmaceutical Industry, 1984 - 2007



Micronomics, Inc.

Table 3: Summary of Royalty Rate Statistics Publicly Available Pharmaceutical License Agreements

			95% Confidence Interval			
	Time Period	Number of Observations	Average Royalty Rate	(+) / (–)	Lower Bound	Upper Bound
	(1)	(2)	(3)	(4)	(5)	(6)
					(3) – (4)	(3) + (4)
1.	4/1/1984 - 12/30/1996	20	5.21%	1.17%	4.04%	6.39%
2.	1/31/1997 - 3/2/2000	20	4.05%	1.07%	2.99%	5.12%
3.	3/15/2000 - 8/30/2002	20	4.88%	1.30%	3.58%	6.17%
4.	9/3/2002 - 4/13/2006	20	8.52%	3.21%	5.31%	11.73%
5.	5/12/2006 - 7/3/2007	10	5.60%	3.09%	2.51%	8.69%
6.	**4/1/1984 - 7/3/2007**	**90**	**5.66%**	**0.91%**	**4.75%**	**6.57%**

Micronomics, Inc.

the upper and lower bounds of confidence intervals calculated around these estimates also increased. Furthermore, the confidence interval constructed around the pharmaceutical industry mean royalty rate between September 2002 and April 2006 shows a statistically significant increase in royalty rates when compared with the confidence interval constructed around the mean rate between January 1997 and March 2000. Results of the study are illustrated in Figure 5 and Table 3.

These results have important implications for the proper use of license agreements within the hypothetical negotiation framework; when royalty rates vary with time, agreements executed closer to the hypothetical negotiation date provide better proxies than those executed at other times.

III. Conclusion

Empirical analysis of publicly available medical device, pharmaceutical and chemical patent license agreements yields the following conclusions. First, industry royalty rate observations are concentrated around a certain royalty range and are not widely dispersed. Indeed, the distribution frequency of sample royalty rates in each industry suggests convergence toward a relatively narrow range of rates. Second, the range of observed industry royalty rates is sufficiently narrow that meaningful conclusions are possible with respect to the average royalty rate for a particular industry. Confidence intervals at the 95 percent level indicate a relatively precise estimate of expected average royalty rates in each industry sampled. Finally, industry royalty rate observations demonstrate variance with respect to time. Results from time series analysis of sample royalty rates in the medical device and pharmaceutical industries show convergence around increasing mean rates over time.

Based upon these results, it seems appropriate to at least consider the use of industry royalty rate data in connection with a *Georgia-Pacific* analysis. Specifically, as detailed under *Georgia-Pacific* factor number 12, analysis of industry royalty rates may indicate the portion of profit or selling price that is customary in that particular industry to allow for use of analogous inventions. The analyses set forth above indicate that common rates may exist in certain industries and that these rates could inform a negotiation within the hypothetical construct.

In general, analysis of industry royalty rates is limited by the availability and reliability of relevant information. The instant analysis was limited to publicly available patent license information for the chemical, medical device and pharmaceutical industries. Where data were available, results from the empirical study demonstrate that potentially meaningful conclusions can be drawn about industry rates from sample data. ■

The authors give special thanks to Steve Porter for editorial comments and to Frank Stabile for assistance with data collection.

Appendix A

SIC Codes Searched by Industry						
	Chemical		Medical Device		Pharmaceutical	
	Code	Description	Code	Description	Code	Description
	(1)	(2)	(3)	(4)	(5)	(6)
1.	2800	Chemicals & Allied Products	3841	Surgical & Medical Instruments & Apparatus	2834	Pharmaceutical Preparations
2.	2819	Industrial Inorganic Chemicals, NEC	3842	Orthopedic, Prosthetic & Surgical Appliances & Supplies		
3.	2820	Plastic Materials, Synthetic Resin/ Rubber, Cellulos (No Glass)	3844	X-Ray Apparatus & Tubes & Related Irradiation Apparatus		
4.	2821	Plastic Materials, Synthetic Resins & Nonvulcan Elastomers	3845	Electromedical & Electotherapeutic Apparatus		
5.	2842	Specialty Cleaning, Polishing and Sanitation Preparations	5047	Wholesale - Medical, Dental & Hospital Equipment & Supplies		
6.	2844	Perfumes, Cosmetics & Other Toilet Preparations				
7.	2869	Industrial Organic Chemicals, NEC				
8.	2870	Argicultural Chemicals				
9.	2879	Pesticides & Agricultural Chemicals, NEC				
10.	2890	Miscellaneous Chemical Products				
11.	2891	Adhesives & Sealants				
12.	2899	Chemicals & Chemical Preparations, NEC				

Source: SEC website (www.sec.gov) and RoyaltyStat (www.royaltystat.com). *Micronomics, Inc.*

Appendix B

Table 1: Summary of Chemical Industry License Agreements

	Licensor(s)	Licensee(s)	Date	Subject	Royalty Rate (Percent)		SIC Code
					Low	High	
	(1)	(2)	(3)	(4)	(5)		(6)
1.	American Dental Association Health Foundation	Enamelon, Inc.	6/24/1992	Methods and compositions for mineralizing calcified tissues.	7.00	7.00	2844
2.	Advanced Fuels, LLC	Caterpillar, Inc.	7/7/1994	Aqueous fuel comprising a mixture of water and carbonaceous material for use in an internal combustion engine.	1.25	2.50	2891
3.	The Nail Consultants Ltd.	Cosmar Corporation	10/10/1995	Activator used to apply protective coating to finger nails.	6.00	6.00	2844
4.	Monsanto Company	Calgene II, Inc.	2/6/1996	Cucumber mosaic coat protein gene for use in certain produce products.	6.00	6.00	2879
5.	NDSU Research Foundation	Agsco, Inc.	2/26/1997	High pH adjuvants for herbicidal compositions.	5.00	5.00	2879
6.	Agrogene Ltd.	Agricultural Glycosystems, Inc.	3/27/1997	Inula extracts as a fungicide for control of plant disease.	3.00	3.00	2879
7.	A-55, LP	Stanton Energy Fund Pty, on behalf of a corporation to be incorporated in Korea	6/9/1997	Aqueous fuel comprising a mixture of water and carbonaceous material for use in an internal combustion engine.	1.00	1.00	2891
8.	Jed H. Checketts	Powerball Industries	9/18/1997	Hydrogen generation system and fuel pellets.	1.00	1.00	2810
9.	Masters Marketing and Development, Inc.	Cra-Z Soap Corp.	8/27/1998	Formulas and patents related to the product known as "Cra-Z Soap."	3.00	10.00	2844
10.	InnoVet, Inc.	SSG, Inc.	4/1/2000	Method for immunostimulation in mammals relating to the IVET 629 biological product.	6.00	6.00	2842
11.	Reed J. Jensen	Renewable Energy Corp.	11/26/2001	Concept to produce commercial fuel, electricity and O_2 and concept to produce H_2 from coal.	0.50	1.00	2870
12.	Helix BioMedix, Inc.	Therapeutic Peptides, Inc.	12/31/2001	Peptides useful in topical, non-pharmaceutical skin care intermediate concentrates and end-use products.	2.00	4.00	2844
13.	Purdue Research Foundation	Nano Dynamics	12/20/2002	Nano-crystalline and sub-micron structures and their use in engineering new materials.	3.00	3.00	2819
14.	Clarkson University	NanoDynamics, Inc.	6/15/2003	Micron and submicron powder milling for the synthesis of metallic powders.	1.00	5.00	2819
15.	Altair Nanotechnologies, Inc. and Altair Nanomaterials, Inc.	Western Oil Sands, Inc.*	1/23/2004	Hydrochloric pigment process to produce pigment grade T_iO_2.	2.00	4.00	2890

* Denotes agreements that include copyrights and/or trademarks in the licensed rights.

Source: RoyaltyStat database and 10k Wizard SEC filings.

Table 1: Summary of Chemical Industry License Agreements							
	Licensor(s)	Licensee(s)	Date	Subject	Royalty Rate (Percent)		SIC Code
					Low	High	
	(1)	(2)	(3)	(4)	(5)		(6)
16.	Paul V. Vose	Integrated Micrometallurgical Systems, Inc.*	5/25/2004	Chemically enhanced microdiffusion techniques for advanced lubricity and corrosion protection.	3.00	3.00	2899
17.	The Board of Regents of the University of Texas on behalf of the University of Texas M.D. Anderson Cancer Center	Xpention	2/17/2005	Tumor proteins for use in the diagnosis of cancers.	5.50	5.50	2891
18.	Technology Innovations, LLC	NaturalNano, Inc.	4/27/2005	Non-medical use of halloysite microtubule processes, structures and applications.	5.00	5.00	2819
19.	United States Department of the Navy represented by the Naval Research Laboratory	NanoDynamics, Inc.	9/23/2005	Use of halloysite microtubules for prevention of bacteria growth in buildings.	2.50	2.50	2819
20.	Electric Aquagenics Unlimited, Inc.	Water Science, LLC*	5/1/2006	Technology that changes the molecular composition of tap water to produce low-cost, non-toxic, electrolyzed oxidative fluids used for cleaning, disinfection, remediation, and hydration.	2.00	4.00	2842
21.	Clarkson University	ND Fusion, Inc.	2/1/2007	Thin film rotating tube reactors to synthesize complex organic and inorganic molecules.	2.00	3.00	2819

* Denotes agreements that include copyrights and/or trademarks in the licensed rights.

Source: RoyaltyStat database and 10k Wizard SEC filings.

Table 2: Summary of Medical Device Industry License Agreements							
	Licensor(s)	Licensee(s)	Date	Subject	Running Royalty (Percent)		SIC Code
					Low	High	
	(1)	(2)	(3)	(4)	(5)		(6)
1.	The Regents of the University of California	Xoma Corporation	9/3/1986	Monoclonal antibodies to gram negative sepsis-related bacteria.	0.50	3.00	3841
2.	Dr. Jacob Zabara	Cyberonics, Inc.	3/15/1988	Nerve stimulation.	1.00	6.00	3845
3.	The Regents of the University of Minnesota	Hypertension Diagnostics, Inc.	9/23/1988	Various uses of arterial compliance and arterial impedance.	1.00	2.00	3841
4.	Acorn Laboratories, Inc.	Ocurest Laboratories, Inc.*	10/30/1991	Eye drop solutions contained in dispensers.	5.00	5.00	3841
5.	Richard Jonathan Cohen	Cambridge Heart, Inc.	2/8/1993	Continuous cardiac output monitoring device.	3.00	3.00	3845
6.	Massachusetts Institute of Technology	Cambridge Heart, Inc.*	9/29/1993	Cardiovascular system identification.	1.50	2.00	3845
7.	Terumo Corporation	Flexmedics Corporation and Microvena Corporation*	4/1/1995	Catheter guide wires.	7.00	16.00	3845
8.	Martin Marietta Energy Systems, Inc.	SpectRx	5/4/1995	Synchronous luminescence detection system.	0.00	6.00	3845
9.	Thomas J. Shaw	Retractable Technologies, Inc.	6/23/1995	Retractable syringe technology including retractable fluid collection devices.	5.00	5.00	3841
10.	The General Hospital Corporation	Palomar Medical Technologies	8/18/1995	Laser equipment for hair reduction and / or removal.	1.25	5.00	3841
11.	Dr. Shu-Tung Li	ReGen Biologics, Inc.	8/24/1995	Self-expandable collagen implants.	3.00	6.00	3841
12.	Nycomed Imaging AS	Molecular Biosystems, Inc.*	10/24/1995	Ultrasound imaging contrast agents.	2.50	3.50	3845
13.	Life Support Division of Litton Systems, Inc.	Chad Therapeutics, Inc.	5/23/1996	Oxygen gas concentrators and pressure intensifiers.	4.00	4.00	3842
14.	Microwave Medical System, Inc.	Arrow International, Inc.	5/24/1996	Microwave generator display and catheter and miniature radiometer temperature sensing device.	3.00	10.00	3841
15.	The Regents of the University of California	UroGen Corp.	9/20/1996	Process for the detection of carcinoma metastases.	5.00	5.00	3845
16.	Arch Development Corporation	R2 Technology, Inc.*	12/23/1996	Computer aided diagnosis of disease in humans.	1.00	1.00	3841
17.	K/S/ HIMPP	Sonic Innovations, Inc.	1/1/1997	Hearing aids.	3.00	3.00	3842
18.	Dr. Martin Nedderman and John Bedard	Dental Resources, Inc.*	2/4/1997	Total Flex Denture devices.	7.00	7.00	3843
19.	EchoCath, Inc.	EP Medsystems, Inc.	2/27/1997	Ultrasound equipment.	2.00	2.00	3845
20.	EchoCath, Inc.	EP Medsystems, Inc.	2/27/1997	Catheter positioning system, needle and stylete positioning system.	2.00	2.00	5047

* Denotes agreements that include copyrights and/or trademarks in the licensed rights.
Source: RoyaltyStat database and 10k Wizard SEC filings.

Table 2: Summary of Medical Device Industry License Agreements

	Licensor(s)	Licensee(s)	Date	Subject	Running Royalty (Percent)		SIC Code
					Low	High	
	(1)	(2)	(3)	(4)	(5)		(6)
21.	Daltex Medical Sciences, Inc.	Arrow International, Inc.	5/30/1997	Catheters and infusion ports and pumps.	5.00	5.00	3841
22.	Angiotech Pharmaceuticals, Inc.	Boston Scientific Corporation and Cook Incorporated	7/9/1997	Stent and endoluminal vascular medical device applications.	3.00	10.00	3841
23.	Sidney Kimmel Cancer Center and Daniel A. Mercola	UroGen Corp.	11/5/1997	Methods for therapy sensitization.	3.00	3.00	3845
24.	The General Hospital Corporation	Laser Photonics	11/26/1997	Phototherapy methods and systems.	1.00	4.00	3841
25.	Incontrol, Inc.	EP Medsystems, Inc.	1/21/1998	External atria defibrillators and temporary catheters.	2.00	2.00	3841
26.	Pharmaco Behavioral Associates, Inc. and The Regents of the University of Minnesota	Lectec Corporation	3/31/1998	Use of cotinine for body weight management and disorders associated with the cessation of use of tobacco products.	1.50	1.50	3845
27.	Becton, Dickinson and Company	Selfcare, Inc.	4/1/1998	Immunodiagnostic assays.	5.25	6.25	3841
28.	Tufts University	Illumina, Inc.	5/6/1998	Fiberoptic and other sensor technology.	3.00	3.00	2834
29.	The Perkin Elmer Corporation	Quantech, Ltd.	6/29/1998	Surface plasmon resonance and conductive film.	2.00	8.00	3841
30.	Arizona Board of Regents for the University of Arizona	IgX Corp.	8/25/1998	Treatment of Helicobacter Pylori.	3.00	5.00	3841
31.	SurgiJet, Inc.	VisiJet, Inc.*	10/23/1998	Ophthalmic applications of fluid jet technology.	5.00	5.00	3841
32.	SurgiJet, Inc.	VisiJet, Inc.	10/23/1998	Fluid jet surgical cutting tool.	7.00	7.00	3841
33.	ArthroCare Corporation	Inamed Corporation	1/27/1999	Disposable wands.	10.00	10.00	3842
34.	ZLB Central Laboratory Blood Transfusion Services SRC	Haemacure Corporation	4/1/1999	Fibrin sealant product.	5.00	5.00	3841
35.	The United States of America, represented by The Secretary of the U.S. Navy	Life Point, Inc.	4/7/1999	Cassette panels used in urine and saliva analysis.	1.00	5.00	3841
36.	American BioMed Inc.	IntraTherapeutics Inc.	4/14/1999	Percutaneous filter for carotid angioplasty.	5.00	5.00	3841
37.	American BioMed Inc.	Manufacturing and Research, Inc.	3/26/1999	Cathlab and balloon cardiovascular catheters.	1.50	5.00	3841
38.	Permatec Technologies AG	SOLVAY Pharmaceuticals B.V.	6/9/1999	Transdermal administration of estrogen and progestin.	5.00	5.00	3841
39.	The Regents of the University of California	Alsius Corporation	11/1/1999	Indwelling heat exchange catheter and method of using.	2.50	2.50	3841

* Denotes agreements that include copyrights and/or trademarks in the licensed rights.
Source: RoyaltyStat database and 10k Wizard SEC filings.

Table 2: Summary of Medical Device Industry License Agreements							
	Licensor(s)	Licensee(s)	Date	Subject	Running Royalty (Percent)		SIC Code
					Low	High	
	(1)	(2)	(3)	(4)	(5)		(6)
40.	Surmodics, Inc.	Innercool Therapies, Inc.	12/1/1999	Single-use catheters treated with photo-reactive agents.	2.00	2.50	3841
41.	HeartSine Technologies, Inc.	Cardiac Science, Inc.*	12/6/1999	Automatic defibrillator devices.	1.00	3.00	3845
42.	Biocoat, Incorporated	Micro Therapeutics, Inc.	12/9/1999	OTW microcatheters.	1.50	5.00	3841
43.	Medi-Ject	Bio-Technology General Corp.	12/22/1999	Needle-free injector devices.	1.00	4.00	3841
44.	University of Kansas Medical Center Research Institute, Inc.	Conway Stuart Medical, Inc.	2/1/2000	Use of radio frequency technology in the gastro-intestinal tract.	2.00	2.00	3845
45.	ReGen Biologics, Inc.	Linvatec Corporation	4/7/2000	Disposable surgical device for meniscal tissue repair.	10.00	12.00	3841
46.	The Regents of the University of California	Allegro Cell Systems, Inc.	5/8/2000	Viral vectors for gene delivery to treat HIV in humans and animals.	2.00	10.00	3845
47.	Sloan-Kettering Institute for Cancer Research	Celsion Corporation	5/19/2000	Gene therapy for the management of human cancer.	3.00	5.00	3845
48.	The Board of Regents of the University of Texas System	Pharmacyclics, Inc.	5/30/2000	Therapeutic and diagnostic devices.	3.00	5.00	3845
49.	CORrestore, LLC	Somanetics Corporation	6/2/2000	Surgical devices and procedures for anterior ventricular restoration.	1.00	9.00	3845
50.	Mitchell S. Roslin, M.D.	Cyberonics, Inc.	8/22/2000	Bi-lateral vagus nerve stimulation (VNS) for the treatment of obesity.	0.50	1.00	3845
51.	ZymoGenetics, Inc.	BioMimetic Pharmaceuticals, Inc.	3/28/2001	Periodontal and cranio-maxillofacial repair and restoration.	5.00	9.00	3841
52.	Bio-Preserve Medical Corporation	Life Systems Corp.	4/1/2001	Organ perfusion devices.	7.00	7.00	3845
53.	Mount Sinai School of Medicine of New York University	Magna-Lab Inc.	7/1/2001	Receiving coil and catheter antenna for MRI devices.	3.00	3.00	3845
54.	Rensselaer Polytechnic Institute	Pro Uro Care	7/13/2001	Electrical impedance tomography treatment of urological conditions.	1.00	3.00	3841
55.	Medjet, Inc.	VISX, Inc.	8/17/2001	Medjet designs, specifications, and "know-how."	5.00	5.00	3845
56.	UNC, Auburn University and Duke University	Immtech International, Inc.	1/28/2002	Anti-microbial pharmaceutical platform for treatment of infectious disease.	5.00	5.00	3841
57.	University of Pittsburgh of the Commonwealth System of Higher Education	Medquest Products, Inc.	2/13/2002	Speed control system for implanted blood pumps.	0.10	0.10	3845
58.	Prof. Dr. Richard Brunner	Occulogix, Inc.	5/6/2002	Treatment of ophthalmic diseases.	0.50	0.50	3841
59.	The John Hopkins University	Biophan Technologies, Inc.	5/17/2002	Magnetic resonance imaging.	4.00	4.00	3841
60.	Reliant Technologies, Inc.	Surgical Laser Technologies, Inc.	5/22/2002	Laser accessories and scanners for surgical and other applications.	5.00	5.00	3845

* Denotes agreements that include copyrights and/or trademarks in the licensed rights.
Source: RoyaltyStat database and 10k Wizard SEC filings.

Table 2: Summary of Medical Device Industry License Agreements							
	Licensor(s)	Licensee(s)	Date	Subject	Running Royalty (Percent)		SIC Code
					Low	High	
	(1)	(2)	(3)	(4)	(5)		(6)
61.	Hall Effect Technologies Limited	Unipath Limited	9/1/2002	Home testing for blood coagulation.	2.00	2.00	3841
62.	Med Enclosure, LLC	Med Close Corp.	10/29/2002	Tongue depressor and arteriotomy closure.	4.00	4.00	3841
63.	The University of British Columbia	MIV Therapeutics, Inc.	2/1/2003	Calcium phosphate compounds on medical devices and on scaffolding.	2.50	2.50	3841
64.	MultiCell Technologies, Inc.	XenoTech, LLC	8/1/2003	Cell lines, cell line improvements and multifunction enhancing medium.	2.50	17.50	3841
65.	Robert M. Campbell, Jr., M.D.	VisiJet, Inc.	9/17/2003	Water jet device for use in medical, surgical and dental fields.	6.00	6.00	3841
66.	Nanoset, LLC	Biophan Technologies, Inc.	1/15/2004	Nanomagnetics for medical research, diagnosis, prevention, treatment or cure for any disease.	5.00	5.00	3845
67.	Mirowski Family Ventures, LLC	Guidant Corporation	1/28/2004	Implantable defibrillators.	3.00	4.00	3841
68.	Competitive Technologies, Inc. and Jenex Corporation	Daeyang E&C Co., Ltd.	6/14/2004	Device that delivers heat to localized areas of the body.	5.00	5.00	3841
69.	Dr. Hans Stock	Occulogix, Inc.	8/6/2004	Treatment of ophthalmic diseases.	1.50	1.50	3841
70.	Bio-Rad Laboratories, Inc.	Calypte Biomedical Corporation	9/28/2004	Immunoassays.	10.00	15.00	3845
71.	Prof. Dr. Richard Brunner	Occulogix, Inc.	10/25/2004	Filters/pumps for treatment of ophthalmic diseases.	0.50	0.50	3841
72.	Live Tissue Connect	ConMed Corporation	3/8/2005	Instruments (with power source) designed to reconnect, bond, or weld living soft tissue.	7.00	10.00	2834
73.	Biophan Technologies, Inc.	Boston Scientific Scimed, Inc.*	6/30/2005	Stents, catheters and embolic protection devices.	3.00	5.00	3841
74.	UST, Inc.	Atricure, Inc.	7/15/2005	Systems for delivery of high intensity focused ultrasound.	4.00	4.00	3841
75.	Lifestream Technologies, Inc.	LifeNexus, Inc.	10/1/2005	Healthcare diagnostic devices.	2.50	2.50	3841
76.	AzurTec, Inc.	PhotoMedex, Inc.	3/30/2006	Cancerous cells detection.	10.00	20.00	3845
77.	Partners in Biomaterials, Inc.	Aquamer, Inc.	3/31/2006	Chemical compounds for dermatological applications.	2.00	5.00	3841

* Denotes agreements that include copyrights and/or trademarks in the licensed rights.
Source: RoyaltyStat database and 10k Wizard SEC filings.

Table 3: Summary of Pharmaceutical Industry License Agreements							
	Licensor(s)	Licensee(s)	Date	Subject	Royalty Rate (Percent)		SIC Code
					Low	High	
	(1)	(2)	(3)	(4)	(5)		(6)
1.	University Patents, Inc.	Amarillo Cell Culture Co.	4/1/1984	Delivery of biologically active components of heterologous species interferon.	4.00	4.00	2834
2.	University of Virginia Alumni Patents Foundation	Insmed Pharmaceuticals, Inc.	9/23/1988	Insulin mediator substance and purification process, dietary supplement for insulin resistant diabetics, and a diabetes screening method.	4.00	4.00	2834
3.	Monsanto Company	The Board of Regents of the University of Texas System	5/15/1991	Synthetic peptides for bone growth stimulation.	10.00	10.00	2834
4.	Joseph G. Cremonese	Aastrom Biosciences, Inc.	7/17/1992	Automated cell culture systems and bioreactors.	3.00	3.00	2834
5.	Laboratoire L. Lafon	Cephalon, Inc.	1/20/1993	Any compound that contains modafinil as an active ingredient.	5.00	7.00	2834
6.	Temple University of the Commonwealth System of Higher Education	Sierra Diagnostics	9/1/1993	Test method for laboratory diagnostics of Gonorrhea.	1.00	4.00	2834
7.	Edenland, Inc. and Patrick T. Prendergast	Holmedco Pharmaceuticals	8/25/1994	Non-HIV based antiserum for removing HIV from blood.	4.00	4.00	2834
8.	Yale University	Oncorx, Inc.	8/31/1994	Antineoplastic and antitrypanosomal agents and antitumor technologies.	4.00	6.00	2834
9.	Cornell Research Foundation, Inc.	Eden Bioscience Corporation	5/1/1995	Biological material (including genes, proteins and peptide fragments, expression systems, cells, and antibodies) used to combat disease in plants.	1.00	2.00	2834
10.	The Regents of the University of Michigan	Matrigen, Inc.	7/13/1995	Biodegradable nano-particles to deliver bioactive material into biological systems, including gene-related technology.	1.50	2.00	2834
11.	Board of Regents of the University of Texas System	Cytoclonal Pharmaceuticals Inc.	6/10/1996	Antigene, gene-targeting, and antisense technology.	4.00	4.00	2834
12.	Board of Regents of the University of Texas System	BioQuest, Inc.	6/14/1996	Treatments for Aquired Immunodeficiency Syndrome.	6.00	6.00	2834
13.	Eli Lilly and Company	Roberts Laboratories Inc.	11/5/1996	Compound for the treatment of functional gastrointestinal disorders.	7.00	7.00	2834
14.	Eli Lilly and Company	Roberts Laboratories Inc.	11/5/1996	Compound for the treatment of functional gastrointestinal disorders.	7.00	7.00	2834
15.	Eli Lilly and Company	Roberts Laboratories Inc.	11/5/1996	Compounds for the treatment of functional gastrointestinal disorders.	7.00	7.00	2834

* Denotes agreements that include copyrights and/or trademarks in the licensed rights.
Source: RoyaltyStat database and 10k Wizard SEC filings.

Table 3: Summary of Pharmaceutical Industry License Agreements							
	Licensor(s)	Licensee(s)	Date	Subject	Royalty Rate (Percent)		SIC Code
					Low	High	
	(1)	(2)	(3)	(4)	(5)		(6)
16.	Eli Lilly and Company	Roberts Laboratories Inc.	12/4/1996	Compound for the treatment of functional gastrointestinal disorders.	8.00	8.00	2834
17.	Massachusetts Institute of Technology	Orasomal Technologies, Inc.	12/16/1996	Polymerized liposomes with enhanced stability.	3.00	3.00	2834
18.	The Ohio State University and The Ohio State University Research Foundation	ImmunoTherapy Corporation	12/26/1996	Modified proteins for the care, treatment, diagnosis, prevention, and/or detection of various conditions and maladies.	2.00	5.00	2834
19.	Dynagen, Inc.	Nastech Pharmaceutical Company, Inc.	12/30/1996	Lobeline to treat nicotine addiction.	10.00	10.00	2834
20.	Nastech Pharmaceutical Company, Inc.	Pfizer Inc.	12/30/1996	Nasal administration of doxylamine succinate and diphenhydramine hydrochloride for the purpose of inducing sleep.	5.00	9.00	2834
21.	The National Institutes of Health, The Centers for Disease Control, and The Food and Drug Administration	Cure, LLC	1/31/1997	Compounds and methods for using those compounds to treat cognitive disorders.	3.00	3.00	2834
22.	Partnership of Craig Aronchick, William H. Lipshutz, and Scott H. Wright	Panax Pharmaceutical Company, Ltd.	2/14/1997	Phosphate salts for use as a colonic purgative or laxative.	2.00	6.00	2834
23.	The Immune Response Corporation	Urogen Corp.	3/5/1997	Tumor sensitation by gene therapy.	10.00	10.00	2834
24.	Pfizer Inc.	Roberts Laboratories Inc.	3/31/1997	Any compound and pharmaceutical compositions and dosage forms containing Sampatrilat either alone or in combination with other active ingredients.	7.00	10.00	2834
25.	New York University	Axonyx, Inc.	4/1/1997	Anti-amyloid peptide inhibitors of amyloidogenesis for the diagnosis, treatment, and prevention of animal or human diseases or conditions.	2.00	4.00	2834
26.	Oxis International, Inc.	Enzon, Inc.	7/29/1997	Low molecular weight polyethylene glycol material used for human therapeutics.	2.00	2.00	2834
27.	The President and Fellows of Harvard College	Seragen, Inc.	8/6/1997	Hybrid proteins.	1.00	2.00	2834
28.	Celtrix Pharmaceuticals	Genzyme Corporation	12/18/1997	Monoclonal antibodies, methods of employing monoclonal antibodies and TGF-B receptors.	1.00	6.00	2834

* Denotes agreements that include copyrights and/or trademarks in the licensed rights.
Source: RoyaltyStat database and 10k Wizard SEC filings.

Table 3: Summary of Pharmaceutical Industry License Agreements							
	Licensor(s)	Licensee(s)	Date	Subject	Royalty Rate (Percent)		SIC Code
					Low	High	
	(1)	(2)	(3)	(4)	(5)		(6)
29.	OklahomaIndustrial Inorganic Chemicals, NEC Medical Research Foundation	Bridge Therapeutic Products, Inc.	1/1/1998	Thazine dyes used to inactivate HIV in biological fluids.	3.00	6.00	2834
30.	Parteq Research and Development Innovations	Dusa Pharmaceuticals	3/11/1998	Methods for diagnosis and treatment using photodynamic therapy compositions.	2.64	3.96	2834
31.	Administrators of the Tulane Educational Fund	Interneuron Pharmaceuticals, Inc.	4/29/1998	Pituitary Adenylate Cyclase Activating Polypeptide for use in humans.	2.50	5.00	2834
32.	UAB Research Foundation	Novirio Pharmaceuticals	6/20/1998	Nucleosides with anti-viral and anti-hepatitis B activity.	3.00	6.00	2834
33.	UAB Research Foundation	Novirio Pharmaceuticals, Ltd.	12/4/1998	Nucleosides for the treatment of HIV infection and Hepatitis B.	1.50	3.00	2834
34.	Baxter Healthcare Corporation	Alsius Corporation*	5/14/1999	Biological heparin medical treatment.	2.00	3.50	2834
35.	P.N. Gerolymatos S.A.	H. Lundbeck A/S	7/26/1999	Pharmaceutical compositions for treatment of Alzheimer's disease and Parkinson's disease.	4.00	6.00	2834
36.	Wake Forest University	IDT, Inc.	8/17/1999	Method of heated perfusion and chemotherapy drug in the treatment of cancers.	6.00	6.00	2834
37.	The University of British Columbia	Chemokine Therapeutics Corp.	9/22/1999	Peptide agonists and antagonits.	2.00	2.00	2834
38.	Anutech Pty Ltd. A.C.N.	Praxis Pharmaceuticals Australia Pty Ltd A.C.N.*	10/14/1999	Phosphosugars for use as neutriceuticals, complementary medicines or cosmetics for the treatment of wounds and immunosuppression.	2.00	2.00	2834
39.	Region Wallonne	Esperion Therapeutics	2/17/2000	Pro-Apolipoprotein A-I for treatment of atherosclerosis and related metabolic disorders.	2.00	3.00	2834
40.	ProQuest Pharmaceuticals, Inc.	Guilford Pharmaceuticals, Inc.	3/2/2000	Compound PQ-1002 for use in humans and or animals.	5.00	9.00	2834
41.	President and Fellows of Harvard College	Boston Life Sciences, Inc.	3/15/2000	Detection and treatment of Attention Deficit Hyperactivity Disorder.	1.00	5.00	2834
42.	Advanced Life Sciences, Inc.	MediChem Research, Inc.	5/18/2000	Antiviral agents.	8.00	8.00	2834
43.	The Regents of the University of California	Osmotics Corporation	6/28/2000	Lipids for epidermal moisturization and repair of barrier function.	5.00	5.00	2834

* Denotes agreements that include copyrights and/or trademarks in the licensed rights.
Source: RoyaltyStat database and 10k Wizard SEC filings.

Table 3: Summary of Pharmaceutical Industry License Agreements

	Licensor(s)	Licensee(s)	Date	Subject	Royalty Rate (Percent)		SIC Code
					Low	High	
	(1)	(2)	(3)	(4)	(5)		(6)
44.	Biostar, Inc.	York Medical, Inc.	10/11/2000	Use of hormones, Pasteurella haemaytica proteins and peptides for treatment of infectious diseases.	2.00	4.00	2834
45.	CytRx Corporation	Merck and Co.	11/1/2000	Copolymer compounds that, when combined, increase the immunogenicity of other substances.	2.00	4.00	2834
46.	The Regents of the University of California	NeurogesX, Inc.	11/1/2000	High dose capsaicin for neuropathic pain relief.	1.00	1.00	2834
47.	Rutgers, The State University	Oxiquant, Inc.	4/13/2001	Redox clamping agents for therapeutic use in the field of oncology.	4.00	4.00	2834
48.	Pharmacia and Upjohn Company	Pharmion Corporation and Pharmion GMBH	6/7/2001	Drug for the treatment of Myelodysplastic Syndrome.	0.00	20.00	2834
49.	"Stitching" NDDO Research Foundation and New Chemical Entities, Ltd.	Neo Therapeutics, Inc.	6/29/2001	Anti-tumor compounds.	5.00	5.00	2834
50.	The Rockefeller University	Callisto Pharmaceuticals	7/25/2001	Pharmaceutical compound to combat bacterial infections, including those caused by Staphylococcus Aureus..	0.75	2.00	2834
51.	Marco Pappagallo, M.D.	AlgoRx Pharmaceuticals, Inc.	8/28/2001	Capsaicin and its analogues for pain relief.	0.50	0.50	2834
52.	Dr. Waldemar Gottardi, Dr. Markus Nagl, and Dr. Andreas Neher	Atlantic Technology Ventures	10/18/2001	Therapeutic use of formulation of N-Chlorotaurine and any of its derivatitves.	4.00	4.00	2834
53.	Pharmion GmbH	Celgene Corporation*	11/16/2001	Compounds that include Thalidomide, excluding Thalidomide analogs.	8.00	8.00	2834
54.	Gentium S.p.A.	Sigma-Tau Industrie Farmaceutiche Riunite S.p.A.*	12/7/2001	Defibrotide in intravenous formulation for the treatment of hematopoietic stem cell transplant patients with hepatic veno-occlusive disease.	7.00	7.00	2834
55.	ILEX Oncology, Inc.	Paralex, Inc.*	12/19/2001	Use of Oxypurinol for treatment of hyperuricemia in humans who are intolerant of allopurinol.	2.75	7.50	2834
56.	University of British Columbia	Helix Biomedix, Inc.	12/31/2001	Antimicrobial peptides.	3.50	3.50	2834
57.	InNexus Corporation	Beglend Corporation	1/7/2002	Antibodies and monoclonal antibody enhancements ("Super Antibody Technology").	3.00	3.00	2834
58.	The National Institutes of Health, The Centers for Disease Control and Prevention and the FDA	Procept, Inc.	2/28/2002	Pharmaceutical compounds and compositions.	6.00	6.00	2834

* Denotes agreements that include copyrights and/or trademarks in the licensed rights.
Source: RoyaltyStat database and 10k Wizard SEC filings.

Table 3: Summary of Pharmaceutical Industry License Agreements							
	Licensor(s)	Licensee(s)	Date	Subject	Royalty Rate (Percent)		SIC Code
					Low	High	
	(1)	(2)	(3)	(4)	(5)		(6)
59.	Cornell Research Foundation, Inc.	Marc Pharmaceuticals, Inc.	6/1/2002	Betulinol derivatives for cancer treatment.	7.00	7.00	2834
60.	Adaltis Inc.	Chembio Diagnostic Systems, Inc.	8/30/2002	HIV diagnostic test.	10.00	10.00	2834
61.	Children's Medical Center Corporation	Boston Life Sciences, Inc.	9/3/2002	Diagnosis, prevention, or treatment of central nervous system disease or condition in humans or animals.	6.00	6.00	2834
62.	Oregon Health and Science University	Oxiquant, Inc.	9/26/2002	Thiol-based chemoprotectant and chemosensitizers for use in oncology and treatment of other disorders.	2.50	2.50	2834
63.	The Trustees of the University of Pennsylvania	Polymedix, Inc.	1/3/2003	Antimicrobial materials.	0.50	3.00	2834
64.	Chemokine Therapeutics Corp.	Pharmaceutical Product Development, Inc.	4/15/2003	CTCE-0214 peptide and peptides derived from CTCE-0214 for therapeutic use in humans.	8.00	12.00	2834
65.	The Board of Regents of the University of Texas System on behalf of The University of Texas Southwestern Medical Center at Dallas	DOR Vaccines, Inc.	6/30/2003	Ricin vaccines, excluding oral, nasal, and inhalation formulations.	5.50	7.00	2834
66.	InNexus Biotechnology International Limited	Corixa Corporation	8/28/2003	Monoclonal antibody based pharmaceuticals.	2.00	2.00	2834
67.	Wyeth Holdings Corporation	DOV Pharmaceutical, Inc.	2/25/2004	Compounds containing Indiplon or Bicifadine and contained in pharmaceutical compounds suitable for human administration.	3.50	5.00	2834
68.	BioDelivery Sciences International, Inc.	Accentia, Inc.	4/12/2004	Antifungal preparations for mucosal surface applications and transmucosal vaccines for chronic sinusitis and asthma.	12.00	14.00	2834
69.	The Board of Regents of the University of Texas System on behalf of The University of Texas Medical Branch at Galveston.	Chrysalis Biotechnology, Inc.	4/27/2004	TP508 Technology and peptides that bind to a thrombin receptor.	2.50	3.30	2834
70.	Brigham Young University	Osmotics Corporation and Osmotics Pharma, Inc.*	5/1/2004	Steroid-derived antibiotics.	5.00	5.00	2834
71.	SuperGen, Inc.	MGI Pharma, Inc.	9/21/2004	Compound for the treatment of Myelodysplastic Syndrome.	20.00	30.00	2834
72.	The University of Kansas Center for Research, Inc.	ProQuest Pharmaceuticals, Inc.	11/23/2004	Water soluble prodrugs.	2.00	2.00	2834
73.	Abbott Laboratories	Advanced Life Sciences Holdings, Inc.	12/13/2004	Compounds ABT-773 and ABT-210.	9.50	19.00	2834

* Denotes agreements that include copyrights and/or trademarks in the licensed rights.
Source: RoyaltyStat database and 10k Wizard SEC filings.

Table 3: Summary of Pharmaceutical Industry License Agreements

	Licensor(s)	Licensee(s)	Date	Subject	Royalty Rate (Percent)		SIC Code
					Low	High	
	(1)	(2)	(3)	(4)	(5)		(6)
74.	CombinatoRx, Inc.	HenKan Pharmaceutical Company*	5/4/2005	Pharmaceutical compound for therapeutic and diagnostic applications in oncology.	6.00	12.00	2834
75.	Depomed, Inc.	Espirit Pharma, Inc.*	7/21/2005	Extended release ciprofloxacin designed to be retained in the stomach for an extended period of time while the delivery system releases the drug.	15.00	25.00	2834
76.	LEO Pharma A\S	Warner Chilcott Company, Inc.*	9/14/2005	Compound calcipotriene (alone or in combination with steroids) to treat psoriasis.	10.00	15.00	2834
77.	The Board of Regents of the University of Texas System on behalf of The University of Texas M. D. Anderson Cancer Center	Bridgetech Holdings International, Inc.	10/18/2005	Synthetic peptides from the Human Papilloma Virus (HPV) to prevent Cervical Cancer.	5.00	5.00	2834
78.	Winston Laboratories, Inc.	Sirius Laboratories, Inc.*	1/30/2006	Pharmaceutical products containing anthralin.	15.00	25.00	2834
79.	Arizona Science and Technology Enterprises, LLC dba Arizona Technology Enterprises, LLC	OrthoLogic Corp.	2/23/2006	Reagents and methods for smooth muscle therapies, promoting wound healing, and reducing scar formation.	3.00	3.00	2834
80.	Pathogenics, Inc.	Acuity Pharmaceuticals, Inc.	4/13/2006	N-Chlorotaurine for the treatment of conjunctivitis and related ocular conditions.	6.00	6.00	2834
81.	Kalium, Inc.	Urigen Holdings, Inc.	5/12/2006	Suppositories for use in the genitourinary and gastrointestinal system.	2.00	4.50	2834
82.	NanoLogix, Inc.	Nutra Pharma Corp.	6/30/2006	Bacterial detection and indentification technology.	6.00	6.00	2834
83.	The Regents of the University of Minnesota	Imagenetix	6/30/2006	Viscous polysaccharides for the reduction of fat in mammals.	7.50	7.50	2834
84.	The Board of Trustees of the University of Illinois	Acuity Pharmaceuticals, Inc.	8/3/2006	Treatment and inhibition of ophthalmic diseases by silencing TGF receptor expression by SiRNA.	1.50	3.00	2834
85.	ADVENTRX Pharmaceuticals, Inc.	Theragenex, LLC	10/20/2006	Pharmaceutical compositions for the treatment, prevention, and/or mitigation of virus-mediated diseases including the common cold, influenza, and herpes.	15.00	20.00	2834
86.	Indevus Pharmaceuticals	Madaus GMBH*	11/3/2006	Trospium chloride for the treatment of overactive bladder and urinary incontinence.	1.50	5.00	2834
87.	Wyeth Pharmaceuticals	DOV Pharmaceutical, Inc.	12/7/2006	Analgesic compounds (bicifadine).	5.00	5.50	2834
88.	The CBR Institute for Biomedical Research	Advanced Genetic Technologies	1/1/2007	Monoclonal antibodies and plasmid 8630.	2.00	3.00	2834
89.	ELLEVAN, LLC	Auriga Laboratories, Inc.*	5/21/2007	Treatment for nasal conditions.	4.00	7.00	2834
90.	David A. Newsome, M.D. and David J. Tate, Jr.	Pipex Pharmaceuticals, Inc.	7/3/2007	Zinc compound for pharmaceutical uses.	3.00	3.00	2834

* Denotes agreements that include copyrights and/or trademarks in the licensed rights.
Source: RoyaltyStat database and 10k Wizard SEC filings.